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Dejan S. Filipovic is Hudson Moore Jr. Endowed Chair with the Department of Electrical, Computer, and Energy Engineering at University of Colorado Boulder. He received the Diploma Engineering degree in electrical engineering from the University of Nis, Serbia in 1994, and the M.S.E.E. and PhD degrees from the University of Michigan, Ann Arbor in 1999 and 2002, respectively. From 1994 to 1997, he was a research assistant at the University of Nis. He became an assistant professor in electrical and computer engineering the University of Colorado in 2002 and was promoted to associate and full professor in 2009 and 2015, respectively. His broader research interests are in applied electromagnetics including antenna theory and design with emphasis on frequency independent and wideband antennas; development of passive millimeter-wave components, systems, and electronic warfare front-ends; low-cost fabrication of RF systems; simultaneous transmit and receive; and multi-physics, multi-scale modeling. His research projects have been funded by the Department of Defense including DARPA, ONR, and NRL, National Science Foundation, and industry including Lockheed Martin, Northrop Grumman, BAE Systems, L3, LGS, First RF, Applied EM, etc. Prof. Filipovic received the Nikola Tesla award for outstanding diploma thesis and best paper award at the 2002 IEEE Antennas and Propagation Symposium. His students have been constantly placed in the finals of the various student paper competitions and have won several times including best paper awards at IEEE Antennas and Propagation Symposium, Antenna Application Symposium, ASIAEM Conference, and GOMACTech. Prof. Filipovic was a two-time recipient of the University of Colorado Provost's Faculty Achievement Award (2008 and 2011) and ECEN Department Holland's Teaching Award (2013). He has graduated twenty PhD students and six MSc thesis students, and currently advises eleven PhD students, on MS student, and one post-doctoral fellow. Prof. Filipovic has co-authored 4 book chapters on spiral and frequency independent antennas, and many peer reviewed journal and conference papers. Prof. Filipovic is a Fellow of IEEE and Associate Editor for the IEEE Transactions on Antennas and Propagation.

EDUCATION

Ph.D. in Electrical Engineering, June 2002, University of Michigan, Ann Arbor. Thesis title: *Multi-functional Slot Spiral Antennas for Airborne and Automotive Applications*. Advisor: Prof. John Volakis

M.S.E.E., June 1999, University of Michigan, Ann Arbor, Michigan. Research topic: *Periodic Boundary Conditions for Hierarchical Finite Elements*. Advisor: Prof. John Volakis

Dipl. Eng. in Electrical Engineering, June 1994, University of Nis, Yugoslavia. Thesis title: *Design and Realization of a Planar Spiral Antenna*. Advisor: Prof. Bratislav Milovanovic

EMPLOYMENT

Full Professor, University of Colorado in Boulder, August 2015-present

Associate Professor, University of Colorado in Boulder, August 2009-August 2015

Assistant Professor, University of Colorado in Boulder, August 2002 – August 2009

Graduate Student Research Assistant, University of Michigan in Ann Arbor, April 1997-July 2002

Research Assistant, University of Nis, Serbia, June 1994 – May 1997

PUBLICATIONS

Peer Reviewed Book Chapters

- [1] **D. S. Filipovic**, M. A. Elmansouri, *Frequency Independent Antennas*, in 5th Edition of Antenna Engineering Handbook, McGraw Hill, 2019.
- [2] **D. S. Filipovic**, T. P. Cencich, *Frequency Independent Antennas*, Ch. 13 in 4th Edition of Antenna Engineering Handbook, pp.13.1-13.67, McGraw Hill, 2007.
- [3] **D. S. Filipovic**, T. P. Cencich and M. W. Nurnberger, *Frequency Independent Antennas*, Encyclopedia of RF and Microwave Engineering, Ed. K. Chang, Vol. 2., pp. 1674-1690, Wiley, 2005.
- [4] T. P. Cencich, **D. S. Filipovic**, *Spiral Antennas*, Encyclopedia of RF and Microwave Engineering, Ed. K. Chang, Vol. 5., pp. 4853-4869, Wiley, 2005.

Published Journal Papers

- [1] K. Hoel, M. Ignatenko, S. Kristoffersen, E. Lier, and **D.S. Filipovic**, *3-D Printed Monolithic GRIN Dielectric-Loaded Double-Ridged Horn Antennas*, IEEE Transactions on Antennas and Propagation, Vol. 68, No. 1, pp. 533-539, Jan. 2020.
- [2] A. Samaiyar, A. H. Abdelrahman, Lj. Boskovic, and **D.S. Filipovic**, *Extreme Offset-Fed Reflectarray Antenna for Compact Deployable Platforms*, IEEE Antennas & Wireless Propagation Letters, Vol. 18, No. 6, pp. 1139 – 1143, June 2019.
- [3] S. Manafi, M. Al-Tarifi, Lj. Boskovic, and **D.S. Filipovic**, *H-Plane Narrow-Wall Double-Ridge Waveguide Coupler in V- and W-Bands*, IEEE Microwave Wireless Components Letters, Vol. 29, No. 3, pp. 204 - 206, Mar. 2019.
- [4] E. Etellisi, M. Elmansouri, and **D.S. Filipovic**, *Wideband Monostatic Co-Polarized Co-Channel Simultaneous Transmit and Receive Broadside Circular Array Antenna*, IEEE Transactions on Antennas and Propagation, Vol. 67, No. 2, pp. 843 - 852, Feb. 2019.
- [5] A. H. Abdelrahman, and **D.S. Filipovic**, *Antenna System for Full-Duplex Operation of Handheld Radios*, IEEE Transactions on Antennas and Propagation, Vol. 67, No. 1, pp. 522-530, Jan. 2019.
- [6] S. Manafi, M. Al-Tarifi, and **D.S. Filipovic**, *Millimeter Wave Double-Ridge Waveguide and Components*, IEEE Transactions on Microwave Theory and Techniques, Vol. 66, No. 11, pp. 4276-4286, Nov. 2018.
- [7] E. Etellisi, M. Elmansouri, and **D.S. Filipovic**, *Broadband Full-Duplex Monostatic Circular Antenna Arrays*, IEEE Antennas and Propagation Magazine, Vol. 60, pp. 62-77, Oct. 2018.
- [8] D.G. Lopez, M. Al-Tarifi, G. Lasser, and **D.S. Filipovic**, *Wideband Antenna Systems for Millimeter-Wave Amplitude-Only Direction Finding*, IEEE Transaction on Antennas and Propagation, Vol. 66, No. 6, pp. 3122-3129, June 2018.
- [9] R. Pack, G. Lasser, and **D.S. Filipovic**, *MAW Spiral Antenna Design for Digital Direction-of-Arrival Sensing*, IEEE Transaction on Antennas and Propagation, Vol. 66, No. 6, pp. 2761-2769, June 2018.
- [10] J. Ha, M. Elmansouri, and **D.S. Filipovic**, *Compact Ultra-Wideband Reflector Antenna with Mechanically Steerable Endfire Beam*, IEEE Antennas and Propagation Magazine, Vol. 60, pp. 72-86, June 2018.
- [11] P. Valaleprasannakumar, M. Elmansouri, and **D.S. Filipovic**, *Broadband Reflector Antenna with High Isolation Feed for Full-Duplex Applications*, IEEE Transaction on Antennas and Propagation, Vol. 66, No. 5, pp. 2281-2290, May 2018.
- [12] E. Etellisi, M. Elmansouri, and **D.S. Filipovic**, *In-Band Full-Duplex Multimode Lens-Loaded Eight-Arm Spiral Antenna*, IEEE Transaction on Antennas and Propagation, Vol. 66, No. 4, pp. 2084-2089, Apr. 2018.
- [13] N. Jastram, M. AlTarifi, and **D.S. Filipovic**, *On the Split-Block Realization of Millimeter-Wave Ridge Waveguide Components*, IEEE Microwave & Wireless Propagation Letters, Vol. 28, No. 4, pp. 296-298, Apr. 2018.

- [14] M. AlTarifi, and **D.S. Filipovic**, *On the Assessment of Antenna Patterns for Wideband Amplitude-Only Direction Finding*, IEEE Antennas & Wireless Propagation Letters, Vol. 17, No. 3, pp. 385-388, Mar. 2018.
- [15] S. Manafi, M. AlTarifi, and **D.S. Filipovic**, *Isolation Improvement Techniques for Wideband Millimeter Wave Repeaters*, IEEE Antennas & Wireless Propagation Letters, Vol. 17, No. 2, pp. 355-358, Feb. 2018.
- [16] J. Ha, and **D.S. Filipovic**, *Wideband and Efficient Slot Cavity Backing for Unidirectional Log-Periodic Antenna*, IEEE Antennas & Wireless Propagation Letters, Vol. 17, No. 2, pp. 299-302, Feb. 2018.
- [17] E. Tianang, M. Elmansouri, and **D.S. Filipovic**, *Ultrawideband Lossless Cavity-Backed Vivaldi Antenna*, IEEE Transactions on Antennas and Propagation, Vol. 66, No. 1, pp. 115-124, Jan. 2018.
- [18] M. Elmansouri, and **D.S. Filipovic**, *Transient Linear TEM Horn Array*, IET Microwaves, Antennas, & Propagation, Vol. 11, No. 15, pp. 2134-2140, Dec. 2017.
- [19] S. Sanghai, M. Ignatenko, and **D.S. Filipovic**, *Low profile two arm inverted-L antenna design for vehicular HF communications*, IEEE Transactions on Antennas & Propagation, Vol. 65, No. 11, pp. 5710-5719, Nov. 2017.
- [20] M. AlTarifi, and **D.S. Filipovic**, *Design and Fabrication of W-band Stabilized-Pattern Dual-Polarized Horn Antennas with DMLS and CNC*, IET Microwaves, Antennas, & Propagation, Vol. 11, No. 19, pp. 1930-1935, Nov. 2017.
- [21] J. Ha, M. Elmansouri, P. Valaleprasannakumar, and **D.S. Filipovic**, *Monostatic Co-Polarized Full-Duplex Antenna with Left or Right Hand Circular Polarization*, IEEE Transactions on Antennas & Propagation, Vol. 65, No. 10, pp. 5103-5111, Oct. 2017.
- [22] P. Valaleprasannakumar, M. Elmansouri, and **D.S. Filipovic**, *Wideband Decoupling Techniques for Dual-Polarized Bi-static Simultaneous Transmit and Receive Antenna Subsystem*, IEEE Transactions on Antennas & Propagation, Vol. 65, No. 10, pp. 4991-5001, Oct. 2017.
- [23] S. Manafi, M. AlTarifi, and **D.S. Filipovic**, *45-110 GHz Quad-Ridge Horn with Stable Gain and Symmetric Beam*, IEEE Transactions on Antennas & Propagation, Vol. 65, No. 9, pp. 4858-4863, Sep. 2017.
- [24] E. Etellisi, M. Elmansouri, and **D.S. Filipovic**, *Wideband Multimode Monostatic Spiral Antenna STAR Subsystem*, IEEE Transactions on Antennas & Propagation, Vol. 65, No. 4, pp. 1845-1854, Apr. 2017.
- [25] J. Ha, M. Al-Tarifi, and **D.S. Filipovic**, *Electro-Thermal Design of Bi-Directional Wide-Boom Log-Periodic Antennas*, IEEE Transactions on Antennas & Propagation, Vol. 65, No. 4, pp. 1661-1669, Apr. 2017.
- [26] M. Elmansouri, J. Ha, and **D.S. Filipovic**, *Ultrawideband TEM Horn Circular Array*, IEEE Transactions on Antennas & Propagation, Vol. 65, No. 3, pp-1374-1379, Mar. 2017.
- [27] D.G. Lopez, M. Ignatenko, and **D.S. Filipovic**, *Eigenmode Prediction of High RF Exposure Frequency Region Inside Vehicles*, IEEE Transactions on Electromagnetic Compatibility, Vol. 59, No. 1, pp. 43-47, Jan. 2017.
- [28] M. Ignatenko, B. Simakauskas, M. Notaros, and **D.S. Filipovic**, *A Phase Center-Stabilized K/Ka/V Band Linearly-Polarized Horn for Luneburg Lenses*, IEEE Antennas & Wireless Propagation Letters, Vol. 16, pp. 2726-2729, 2017.
- [29] M. Elmansouri, A. Kee, and **D.S. Filipovic**, *Wideband Antenna Array for Simultaneous Transmit And Receive (STAR) Applications*, IEEE Antennas & Wireless Propagation Letters, Vol. 16, pp. 1277-1280, 2017.
- [30] M. Elmansouri, and **D.S. Filipovic**, *Ultrawideband Flush-Mounted Antenna*, IEEE Antennas & Wireless Propagation Letters, Vol. 16, pp. 1973-1976, 2017.
- [31] M. Elmansouri, and **D.S. Filipovic**, *Miniaturization of TEM Horn Using Spherical Mode Engineering*, IEEE Transaction Antennas and Propagation, Vol. 64, No. 12, 5064-5073, Dec. 2016.

- [32] M. Ignatenko, S. Sanghai, G. Lasser, B. Alen, R. Smith, M. Notaros, and **D.S. Filipovic**, *Wideband High-Frequency Antennas for Military Vehicles*, IEEE Antennas & Propagation Magazine – Special Issue, Vol. 58, No. 6, pp. 64-74, Dec. 2016.
- [33] M. AlTarifi, and **D.S. Filipovic**, *Design and Fabrication of a Full W-Band Multi-Step Waveguide 90° Twist*, IEEE Microwave and Wireless Propagation Letters, Vol. 26, No. 11, pp. 903-905, Nov. 2016.
- [34] J. Ha, M. Al-Tarifi, and **D.S. Filipovic**, *Design of Wideband Combined Annular Slot-Monopole Antenna (CASMA)*, IEEE Transactions on Antennas & Propagation, Vol. 64, No. 9, pp. 4138-4143, Sep. 2016.
- [35] M. Ignatenko and **D.S. Filipovic**, *On the Design of Vehicular Electrically Small Antennas for NVIS Communications*, IEEE Transactions on Antennas & Propagation, Vol. 64, No. 6, pp. 2136-2145, June 2016.
- [36] E. Etellisi, M. Elmansouri, and **D.S. Filipovic**, *Wideband Monostatic Simultaneous Transmit and Receive (STAR) Antenna*, IEEE Transaction Antennas and Propagation, Vol. 64, No. 1, pp.6-15, Jan 2016.
- [37] D.G. Lopez, M. Ignatenko, and **D.S. Filipovic**, *Low-Profile Tri-band Inverted-F Antenna for Vehicular Applications in HF and VHF Bands*, IEEE Transaction Antennas & Propagation, Vol. 63, No. 11, pp. 4632-4639, Nov. 2015.
- [38] N. Jastram, and **D.S. Filipovic**, *Design of Wideband Millimeter Wave Micromachined Rotman Lens*, IEEE Transaction Antennas and Propagation, Vol. 63, No. 6, pp. 2790-2796, June 2015.
- [39] M. Elmansouri, and **D.S. Filipovic**, *Effects of Lossless Cavity-backing on Power Spiral Antenna in Time-Domain*, Microwave and Optical Technology Letters, Vol. 57, No. 3, pp. 677–681, Mar. 2015.
- [40] M. Ignatenko, and **D.S. Filipovic**, *Evaluation of Vehicle Bottom for the Placement of HF-VHF Antennas*, IEEE Transaction Antennas and Propagation, Vol. 63, No. 2, pp. 776-781, Feb. 2015.
- [41] R. Sammeta, and **D.S. Filipovic**, *Improved Efficiency Lens-Loaded Cavity-Backed Transmit Sinuous Antenna*, IEEE Transaction Antennas and Propagation, Vol. 62, No. 12, pp. 6000-6009, Dec., 2014.
- [42] R. Sammeta, and **D.S. Filipovic**, *Reduced Size Planar Dual-Polarized Log-Periodic Antenna for Bidirectional Transmit/Receive Applications*, IEEE Transaction Antennas and Propagation, Vol. 62, No. 11, pp. 5453-5461, Nov. 2014.
- [43] M. Elmansouri, J. Bargerion, and **D.S. Filipovic**, *Simply-Fed Four-Arm Spiral-Helix Antenna*, IEEE Transaction Antennas and Propagation, Vol. 62, No. 9, pp. 4864-4868, Sep. 2014.
- [44] R. Sammeta, and **D.S. Filipovic**, *Quasi Frequency-Independent Increased Bandwidth Planar Log-Periodic Antenna*, IEEE Transactions on Antennas & Propagation, Vol. 62, No. 4, pp.1937-1944, April 2014.
- [45] N. Sutton, and D.S. Filipovic, *Wideband Micromachined Broadside Coupled Schiffman Phase Shifter*, IET Electronic Letters, Vol. 50 No. 6 pp. 454–456, March 2014.
- [46] J. Mruk, N. Sutton, and **D.S. Filipovic**, *Micro-Coaxial Fed 18 to 110 GHz Planar Log-Periodic Antennas with RF Transitions*, IEEE Transactions on Antennas & Propagation, Vol.62, No.2, pp.968-972, Feb. 2014.
- [47] N. Jastram, and **D.S. Filipovic**, *Wideband Millimeter Wave Surface Micromachined Tapered Slot Antenna*, IEEE Antennas and Wireless Propagation Letters, pp. 285-288, Feb. 2014.
- [48] N. Jastram, and **D.S. Filipovic**, *PCB-Based Prototyping of 3D Micromachined RF Subsystems*, IEEE Transactions on Antennas & Propagation, Vol. 62, No. 1, pp.420-429, Jan. 2014.
- [49] M. Elmansouri, and **D.S. Filipovic**, *Lens loading approach for improving ultra-wideband performance of spiral antennas*, IET Part-H Antennas and Microwaves, Vol. 8, No. 12, pp. 937-942, Dec. 2013.

- [50] N. Kefauver, T. Cencich, and **D.S. Filipovic**, *On the Frequency Independent Modes of a Four-Arm Modulated Arm Width Spiral*, IEEE Transaction on Antennas and Propagation, Vol. 61, No. 9, pp. 4467-4475, Sep. 2013.
- [51] M. Radway, and **D.S. Filipovic**, *Wideband Pattern Nulling with Multiarmed Spiral Antennas*, IEEE Antennas Wireless Propagation Letters, Vol. 12, pp. 864-867, 2013.
- [52] M. Elmansouri, and **D.S. Filipovic**, *Low-Dispersion Spiral Antennas*, IEEE Transaction Antennas and Propagation, Vol. 60, no.12, pp. 5522-5530, Dec. 2012.
- [53] K. Kim, N. Kefauver, M. Buck and **D.S. Filipovic**, *Single and Bi-Layer Four-Arm Mode 1 Spiral Antennas and Their Feed Structures*, International Journal of RF and MW Computer Aided Engineering, Vol 22, No. 6, pp. 652-662, Nov. 2012.
- [54] H. Zhou, N. Sutton, and **D.S. Filipovic**, *Wideband and Dual-Wideband Millimeter-Wave Log-Periodic Dipole Array Antennas*, IEEE Transaction Antennas and Propagation, Vol. 60, No. 10, pp. 4573-4581, Oct., 2012.
- [55] J. Mruk, and **D.S. Filipovic**, *Micro-Coaxial V-/W- Band Filters and Contiguous Diplexers*, IET Part-H Antennas and Microwaves, Vol. 6, No. 10, pp. 1142-1148, Oct. 2012.
- [56] N. Sutton, M. Oliver, and **D.S. Filipovic**, *Wideband 18-40GHz Surface Micromachined Branchline Quadrature Hybrid*, IEEE Microwave Wireless Components Letters, Vol. 22, No. 9, pp. 462-464, Sep. 2012.
- [57] M. Radway, and **D.S. Filipovic**, *Four-Armed Spiral-Helix Antenna*, IEEE Antennas Wireless Propagation Letters, Vol. 11, pp. 383-386, 2012.
- [58] M. Elmansouri, M. Radway, and **D.S. Filipovic**, *Frequency- and Time-Domain Performance of Four-Arm Mode-2 Spiral Antennas*, IEEE Transaction Antennas and Propagation, Vol. 60, No. 6, pp. 2627-2634, June 2012.
- [59] J. McDonald and **D.S. Filipovic**, *Biconical Antenna over Ground Plane*, IEEE Transaction on Antennas and Propagation, Vol. 60, No. 4, pp. 2093-2096, Apr. 2012.
- [60] T.M. Wallis, K. Kim, **D.S. Filipovic**, and P. Kabos, *Broadband Metrology of Nanofibers to Enable RF Interconnects*, IEEE Microwave Magazine, *Special Issue Microwave Nanopackaging and Interconnects*, Vol. 12, No. 7, pp. 51-61, Dec. 2011.
- [61] M. Elmansouri, and **D.S. Filipovic**, *Pulse Distortion and Mitigation Thereof in Spiral Antenna-Based UWB Communication Systems*, IEEE Transactions on Antennas and Propagation, Vol. 59, No. 10, pp.3863-3871, Oct. 2011.
- [62] H. Zhou, X. Chen, D. Espinoza, A. Mickelson, and **D.S. Filipovic**, *Nanoscale Optical Dielectric Rod Antenna for On-Chip Interconnecting Networks*, IEEE Transaction on Microwave Theory and Techniques, *Special Issue on RF Nanoelectronics*, Vol. 59, No. 10, pp. 2624-2632, Oct. 2011
- [63] K. Kim, M. Wallis, P. Rice, D. Gu, S. Lim, A. Imtiaz, P. Kabos, and **D.S. Filipovic**, *High-Frequency Characterization of Contact Resistance and Conductivity of Platinum Nanowires*, IEEE Transaction on Microwave Theory and Techniques, *Special Issue on RF Nanoelectronics*, Vol. 59, No. 10, pp. 2647-2654, Oct. 2011.
- [64] M. Radway, T. Cencich, and D.S.Filipovic, *Pattern Purity of Coiled-Arm Spiral Antennas*, IEEE Transaction on Antennas and Propagation, Vol. 59, No. 3, pp.755-768, Mar. 2011.
- [65] J. McDonald and **D.S. Filipovic**, *A Monocone-Bicone Collinear Array*, IEEE Transaction on Antennas and Propagation, Vol. 58, No.12, pp.2905-3912, Dec. 2010.
- [66] J. Mruk, Y. Saito, K. Kim, M. Radway, and **D. S. Filipovic**, *Directly Fed Millimeter Wave Two-Arm Spiral Antenna*, IET Electronic Letters, Vol. 46, No. 24, pp. 1585-1587, Dec. 2010.
- [67] H. Zhou, Z. Li, L. Shang, A. Mickelson, and **D.S. Filipovic**, *On-Chip Wireless Optical Broadcast Interconnection Network*, IEEE Journal Lightwave Techn., Vol. 28, No.24, pp. 3569-3577, Dec. 2010.

- [68] N. Kefauver, T. Cencich, and **D.S. Filipovic**, *Modulated Arm Width (MAW) Spiral: Theory, Modeling, Design and Measurements*, IEEE Transaction on Antennas and Propagation, Vol. 58, No. 11, pp. 3515-3524, Nov. 2010.
- [69] J. Mruk, N. Kefauver, and **D.S. Filipovic**, *Band Rejection Methods for Planar Log-Periodic Antennas*, IEEE Transaction on Antennas and Propagation, Vol. 58, No.7, pp. 2288-2294, July 2010.
- [70] Z. Li, M. Mohamed, H. Zhou, L. Shang, **D.S. Filipovic**, A. Mickelson, M. Vacharajani, X. Chen, W. Park, and Y. Sun, *Global On-chip Coordination at Light Speed*, *IEEE Des. Test of Comp.*, Vol. 27, No. 4, pp. 54-65, Jul./Aug., 2010.
- [71] C-J. Chiang, T.M. Wallis, D. Gu, A. Imtiaz, P. Kabos, P.T. Blanchard, K.A. Bertness, N.A. Sanford, K. Kim, and **D.S. Filipovic**, *High Frequency Characterization of a Schottky Contact to a GaN Nanowire Bundle*, Journal of Applied Physics, Vol. 107, No. 12, pp. 123301.1-6, June, 2010.
- [72] K. Kim, T. M. Wallis, P. Rice, C.-J. Chiang, A. Imtiaz, P. Kabos, and **D. S. Filipovic**, *A Framework for Broadband Characterization of Individual Nanowires*, IEEE Microwave and Wireless Components Letters, Vol. 20, No. 3, pp.178-180, Mar. 2010.
- [73] Y. Saito, D. Fontaine, J-M. Rollin, and **D.S. Filipovic**, *Micro-coaxial Ka-Band Gysel Power Dividers*, Microwave and Optical Technology Letters, Vol. 52, no. 2, pp. 474-478, Feb. 2010.
- [74] A. Lalezari, F. Lalezari, **D.S. Filipovic**, *Calibration and Evaluation of Body Interaction Effects for the Enhancement of a Body-Borne Radio Direction Finding System*, Journal of Applied Computational Electromagnetics Society, Vol. 25, No. 1, pp. 75-88, Jan. 2010.
- [75] H. Zhou, N. Kefauver, and **D.S. Filipovic**, *A Wideband Patch Antenna with Dual-Cylindrical Probe Feed*, IEEE Antennas and Wireless Propagation Letters, Vol. 8, pp. 1321-1324, 2009.
- [76] Y. Saito, J. Mruk, J.M. Rollin, and **D.S. Filipovic**, *X-through Q-band Log-Periodic Antenna with Monolithically Integrated μ -coaxial Impedance Transformer Feed*, IET Electronics Letters, Vol. 45, No. 15, pp. 775-776, July 2009.
- [77] Y. Saito, M. Lukic, D. Fontaine, J-M. Rollin, and **D.S. Filipovic**, *Monolithically Integrated Corporate-Fed Cavity-Backed Antennas*, IEEE Transactions on Antennas & Propagation, Vol. 57, No.9, pp. 2583-2590, Sept. 2009.
- [78] Y. Saito, D. Fontaine, J-M. Rollin, and **D.S. Filipovic**, *Monolithic Microcoaxial Power Dividers*, IET Electronic Letters, Vol. 45, No. 9, pp. 469-470, Apr., 2009.
- [79] **D.S. Filipovic**, M. Lukic, Y. Lee and D. Fontaine, *Monolithic Rectangular Coaxial Lines and Resonators with Embedded Dielectric Support*, IEEE Microwave and Wireless Components Letters, Vol. 18, No. 11, pp. 740-742, 2008.
- [80] M. Uhm, K. Kim and **D.S. Filipovic**, *Ultra-Wideband Bandpass Filters using Quarter-wave Short-Circuited Shunt Stubs and Quarter-wave Series Transformers*, IEEE Microwave and Wireless Components Letters, Vol. 18, No. 10, pp. 668-670, Oct. 2008.
- [81] M. Buck, **D.S. Filipovic**, *Two-Arm Sinuous Antennas*, IEEE Transactions on Antennas & Propagation, Vol. 56, No. 5, pp. 1229-1335, May, 2008.
- [82] J. McDonald, **D.S. Filipovic**, *On the Bandwidth of Monocone Antennas*, IEEE Transactions on Antennas & Propagation, Vol. 56, No. 4, pp.1196-1121, Apr. 2008.
- [83] Z. Popovic, S. Rondineau, **D.S. Filipovic**, D. Sherrer, C. Nichols, J-M. Rollin, and K. Vanhille, *An Enabling New 3d Architecture for Microwave Components and Systems*, Microwave Journal, Vol. 51, No. 2, pp. 66-73, Feb. 2008.
- [84] Y. Saito, **D. S. Filipovic**, *Analysis and Design of Monolithic Rectangular Coaxial Lines for Minimum Coupling*, IEEE Transactions on Microwave Theory and Techniques, Vol. 55, No. 12, pp. 2521-2530, Dec. 2007.
- [85] Y. Lee, **D. S. Filipovic**, *Efficient Mutiphysics Modeling of Microelectromechanical Switches*, International Journal of Multiphysics, Vol. 1, No. 4, pp. 457-471, Dec. 2007.

- [86] M. Lukic, **D. S. Filipovic**, *Surface Micromachined, Dual Ka-band Cavity-Backed Patch Antenna*, IEEE Transactions on Antennas and Propagation, Vol. 55, No. 7, pp. 2107-2109, July 2007.
- [87] K. Vanhille, D. Fontaine, C. Nichols, Z. Popovic, and **D. S. Filipovic**, *Ka-Band Miniaturized Quasi-Planar High-Q Resonators*, IEEE Transactions on Microwave Theory and Techniques, Vol. 55, No. 6, pp. 1272-1279, June 2007.
- [88] M. Buck, **D. S. Filipovic**, *Bi-layer, Mode 2, Four-Arm Spiral Antenna*, IET Electronic Letters, Vol. 43, No. 6, pp. 313-314, March, 2007.
- [89] M. Lukic, **D. S. Filipovic**, *Modeling of Three-Dimensional Surface Roughness Effects with Application to μ -Coaxial Lines*, IEEE Transactions on Microwave Theory and Techniques, Vol. 55, No. 3, pp. 518-525, March 2007.
- [90] Y. Lee, Y. Park, F. Niu and **D. S. Filipovic**, *Design and Optimization of RF ICs with Embedded Linear Macromodels of MEMS Resonators Using Artificial Neural Network*, International Journal of RF and MW Computer Aided Engineering, Vol. 17, No.2, pp.196-209, Mar. 2007.
- [91] M. Buck, **D. S. Filipovic**, *Spiral Cavity Backing Effects on Pattern Symmetry and Modal Contamination*, IEEE Antennas and Wireless Propagation Letters, Vol. 5, No. 1, pp. 243-246, Dec. 2006.
- [92] **D. S. Filipovic**, Z. B. Popovic, M. V. Lukic, and K. Vanhille, *Design of Microfabricated Rectangular Coaxial Lines and Components for mm-Wave Applications*, IEEE YUMTT Review, pp. 11-16, Nov. 2006.
- [93] Y. Lee, Y. Park, F. Niu and **D. S. Filipovic**, *Design and Optimization of One-Port RF MEMS Resonators and Related Integrated Circuits Using ANN Based Macromodeling Approach*, IEE Proceedings Circuits, Devices and Systems, Vol. 153, No. 5, pp. 480-488, Oct. 2006.
- [94] K. Vanhille, D. Fontaine, C. Nichols, **D. S. Filipovic**, and Z. Popovic, *Quasi-Planar High Q mm-Wave Resonators*, IEEE Transactions on Microwave Theory and Techniques, Vol. 54, No. 6, pp. 2439-2446, June 2006.
- [95] M. Lukic, S. Rondineau, Z. Popovic and **D. S. Filipovic**, *Modeling of Rectangular μ -Coaxial Lines*, IEEE Transactions on Microwave Theory and Techniques, Vol. 55, No. 5, pp. 2068-2076, May 2006.
- [96] **D. S. Filipovic**, A. Bhobe, T. Cencich, *Low-Profile Broadband Dual-Mode Four-Arm Slot Spiral Antenna with Dual Dyson Balun Feed*, IEE Proceedings Microwave, Antennas & Propagation, Vol. 152, No. 12, pp. 527-533, Dec. 2005.
- [97] Y. Lee, **D. S. Filipovic**, *ANN Based Electromagnetic Models for the Design of RF MEMS Switches*, IEEE Microwave and Wireless Components Letters, Vol. 14, No. 11, pp. 823-825, Nov. 2005.
- [98] N. Stutzke, **D. S. Filipovic**, *Four-Arm 2nd- Mode Slot Spiral Antenna With Simple Single-Port Feed*, IEEE Antennas and Wireless Propagation Letters, Vol. 4, pp. 213-216, 2005.
- [99] M. Buck, **D. S. Filipovic**, *Split-Beam Mode Four-Arm Slot Sinuous Antenna*, IEEE Antennas and Wireless Propagation Letters, Vol. 3, No. 1, pp. 83-86, 2004.
- [100] Y. Lee, Y. Park, F. Niu, B., Bochman, K.C. Gupta, **D. S. Filipovic**, *ANN Modeling of RF MEMS Resonators*, Special Issue of International Journal of RF and MW Computer Aided Engineering, pp. 302-316, June, 2004.
- [101] **D.S. Filipovic** and J.L. Volakis, *Conformal Multi-functional Slot Aperture (combo-antenna) for Automotive Applications*, IEEE Transactions on Antennas & Propagation, Vol. 52, No. 2, pp. 563-571, Feb. 2004.
- [102] **D.S. Filipovic** and J.L. Volakis, *Novel Slot Spiral Antenna Designs for Dual-band/Multi-band Operation*, IEEE Transactions on Antennas & Propagation, Vol. 51, No. 3, pp. 430-440, March, 2003.

- [103] J.L. Volakis, T.F. Eibert, **D.S. Filipovic**, Y.E. Erdemli and E. Topsakal, *Hybrid Finite Element Methods for Array and FSS Analysis Using Multiresolution Elements and Fast Integral Techniques*, Electromagnetics, pp. 297-313, May 2002.
- [104] **D.S. Filipovic** and J.L. Volakis, *A Broadband Meanderline Slot Spiral Antenna*, IEE Proceedings, Microwaves, Antennas & Propagation, Vol. 149, No. 2, pp. 98-105, April 2002.
- [105] J.L. Volakis, M.W. Nurnberger and **D.S. Filipovic**, *A Broadband Cavity Backed Slot Spiral Antenna*, IEEE Antennas & Propagation Magazine, Vol. 43, No. 6, pp. 15-26, Dec. 2001.
- [106] **D.S. Filipovic**, L.S. Andersen and J.L. Volakis, *A Multiresolution Method for Simulating Infinite Periodic Arrays*, IEEE Transactions on Antennas & Propagation, Vol. 48, No. 11, pp. 1784-1786, Nov. 2000.
- [107] H.T. Anastassiou, J.L. Volakis and **D.S. Filipovic**, *Integral Equation Modeling of Cylindrically Periodic Scatterers in the Interior of a Cylindrical Waveguide*, IEEE Transactions on Microwave Theory and Techniques, Vol. 46, No. 11, pp.1713-1720, Nov. 1998.

Journal Papers Accepted for Publishing

- [1] P. VPKumar, M. Elmansouri, Lj. Boskovic, M. Ignatenko, and **D.S. Filipovic**, *Wideband Quasi-Monostatic Simultaneous Transmit and Receive Reflector Antenna*, IEEE Transactions on Antennas and Propagation (Early Access, 2020).
- [2] E. Tianang, M. Elmansouri, and **D.S. Filipovic**, *Ultrawideband Flush-Mountable Dual-Polarized Vivaldi Antenna*, IEEE Transactions on Antennas and Propagation (Early Access, 2020).
- [3] R. Pack, A. Brannon, and **D.S. Filipovic**, *Tightly-Coupled Array of Horizontal Dipoles Over a Ground Plane*, IEEE Transactions on Antennas and Propagation (Early Access, 2020).

Papers Submitted to Journals and Currently in Review

[4]

Peer Reviewed Conference Papers Published in Conference Proceedings

- [1] A. Samaiyar, P. VPKumar, Lj. Boskovic, M. Elmansouri, S. Rao, and **D.S. Filipovic**, *Phased Array Antenna for Bi-Static Simultaneous Transmit and Receive (STAR) System*, 2019 IEEE International Symposium on Phased Array Systems and Technology, Waltham, MA, Oct. 2019.
- [2] C. Mulero Hernandez, M. Elmansouri, Lj. Boskovic, and **D.S. Filipovic**, *High-Directivity Beam-Steerable Lens Antenna for Simultaneous Transmit and Receive*, 2019 IEEE International Symposium on Phased Array Systems and Technology, Waltham, MA, Oct. 2019.
- [3] E. Tianang M. Elmansouri, Lj. Boskovic, and **D.S. Filipovic**, *Design of a Dual-Circularly Polarized X-Band Active Phased Array Based on a Balanced-Diplexer*, 2019 IEEE International Symposium on Phased Array Systems and Technology, Waltham, MA, Oct. 2019.
- [4] J. Cazden, Lj. Boskovic, and **D.S. Filipovic**, *Design and Performance of Log Periodic Dipole Arrays with Integrated Impedance Transforming Feeds*, Antenna Application Symposium, Monticello, IL, Sept. 2019.
- [5] M. Elmansouri, P. Hoover, and **D.S. Filipovic**, *Performance of Multi-Arm Sinuous Antenna in Analog and Digital Angle of Arrival Estimation*, IEEE APS/URSI 2019, Atlanta, GA, July 2019.
- [6] E. Tianang, M. Elmansouri, Lj. Boskovic, and **D.S. Filipovic**, *Balanced-Diplexer Frequency Division Duplex Subarray for X-band Phased Array*, IEEE APS/URSI 2019, Atlanta, GA, July 2019.
- [7] P. Valale Prasannakumar, A. Samaiyar, M. Elmansouri, S. Rao, and **D.S. Filipovic**, *Bi-Static Simultaneous Transmit And Receive (STAR) Antenna Array System*, IEEE APS/URSI 2019, Atlanta, GA, July 2019.
- [8] M. Elmansouri, E. Etellisi, Lj. Boskovic, and **D.S. Filipovic**, *Wideband Spectrum Sensing and Direction Finding Antenna Subsystem*, 2019 IEEE-APS Topical Conference on Antennas and Propagation in Wireless Communications (APWC), Granada, Spain, Sept, 2019.

- [9] M. Elmansouri, and **D.S. Filipovic**, *TEM Horn Inspired Wideband Antennas for Diverse Applications*, 2019 IEEE-APS Topical Conference on Antennas and Propagation in Wireless Communications (APWC), Granada, Spain, Sept, 2019.
- [10] S. Manafi, J.M. Fernandez Gonzalez, and **D.S. Filipovic**, *Design of a Perforated Flat Luneburg Lens Antenna Array for Wideband Millimeter-Wave Applications*, 2019 European Conference on Antennas and Propagation EuCAP, Krakow, Poland, Apr. 2019.
- [11] E. Etellisi, M. Elmansouri, and **D.S. Filipovic**, *Co-Channel Simultaneous Transmit and Receive with 3-Element Array Antenna*, ACES 2019, Miami, FL, Apr. 2019.
- [12] P. Valale Prasannakumar, M. Elmansouri, and **D.S. Filipovic**, *Wideband Bi-static Offset-Fed Reflector Simultaneous Transmit And Receive Antenna System*, 2018 Indian Conference on Antennas and Propagation InCAP, Hyderabad, India, Dec. 2018.
- [13] M. Ignatenko, B. Allen, S. Sanghai, Lj. Boskovic, and **D.S. Filipovic**, *Coupling Suppression and Measurements on a Millimeter Wave Cylindrical Repeater*, 2018 AMTA Conf., Williamsburg, VA, Oct. 2018
- [14] Lj. Boskovic, M. Ignatenko, and **D.S. Filipovic**, *Low-Cost Pressure/Temperature Measurements of Wideband Antennas*, 2018 AMTA Conf., Williamsburg, VA, Oct. 2018
- [15] E. G. Tianang, M. A. Elmansouri, and **D.S. Filipovic**, *High Isolation Diplexer-Free Dual-Polarized Array for Geostationary Satellites*, IEEE APS/APWC 2018, Cartagena, COL, September 2018
- [16] C. Andrews, N. Jastram, and **D.S. Filipovic**, *Radome Enhancement Technique for High-Power Wideband Millimeter Wave Antennas*, IEEE AP and USNC/URSI 2018, Boston, MA, July 2018
- [17] C. A. Mulero, M. Ignatenko, and **D.S. Filipovic**, *On the Design of Wideband Monostatic STAR Systems with Spherically Stratified Lenses*, IEEE AP and USNC/URSI 2018, Boston, MA, July 2018
- [18] J. Cazden, M. Al-Tarifi, L. Boskovic, and **D.S. Filipovic**, *A W-Band Curved Aperture Horn Antenna with Consistent Radiation Patterns*, IEEE AP and USNC/URSI 2018, Boston, MA, July 2018
- [19] B. F. Allen J. Ha, N. Jastram, S M. Rudolph, and **D.S. Filipovic**, *Isolation Improvement of Cylindrical Millimeter-Wave Repeaters Using a Reactive Impedance Surface*, IEEE AP and USNC/URSI 2018, Boston, MA, July 2018
- [20] A. Samaiyar, A. H. Abdelrahman, and **D.S. Filipovic**, *Iterative Phase Correction Technique for Design of Non-Conventional Reflectarray Antennas*, IEEE AP and USNC/URSI 2018, Boston, MA, July 2018
- [21] N. Jastram, and **D.S. Filipovic**, *Performance of a Spiral Antenna System for Wideband Sensing and Direction Finding*, IEEE AP and USNC/URSI 2018, Boston, MA, July 2018
- [22] P. Valale Prasannakumar, M. A. Elmansouri, and **D.S. Filipovic**, *High-Directivity Broadband Simultaneous Transmit and Receive (STAR) Antenna System*, IEEE AP and USNC/URSI 2018, Boston, MA, July 2018
- [23] P. Valale Prasannakumar, M. Elmansouri, and **D.S. Filipovic**, *Full-Duplex Antenna Subsystems for Microwave Radio Links*, 2018 IcETRAN Conference, Palic, Ser., June 2018
- [24] J. Cazden, M. Al-Tarifi, L. Boskovic, and **D.S. Filipovic**, *W-Band Amplitude-Only Direction Finding with Curved-Aperture Horn Antennas*, GSMM 2018, Boulder, CO, May 2018
- [25] S. Manafi, M. Pinto, M. Al-Tarifi, G. Lasser, Z. Popovic, and **D.S. Filipovic**, *Enabling Passive Components for High-Power Wideband Millimeter Wave Repeater Applications*, GSMM 2018, Boulder, CO, May 2018
- [26] B. F. Allen, M. Ignatenko, L. Boskovic, and **D.S. Filipovic**, *Antenna Decoupling with a 3D Printed Tapered Ribbed Structure*, GSMM 2018, Boulder, CO, May 2018
- [27] K. V. Hoel, S. Kristoffersen, M. Ignatenko, and **D.S. Filipovic**, *Half Ellipsoid Luneburg GRIN Dielectric Lens Loaded Double Ridged Horn Antenna*, EuCAP 2018, London, UK, April 2018
- [28] P. Valale Prasannakumar, M. A. Elmansouri, M. Ignatenko, and **D.S. Filipovic**, *Reduction of Coupling Between Flush-Mounted Antennas*, ACES 2018, Denver, CO, Mar. 2018

- [29] M. Al-Tarifi, and **D.S. Filipovic**, *Impact of Flat Radomes on Amplitude-Only Direction finding performance*, ACES 2018, Denver, CO, Mar. 2018
- [30] M. Ignatenko, C. A. Mulero, and **D.S. Filipovic**, *Design of Broadband Luneburg Lens Feed Manifold*, ACES 2018, Denver, CO, Mar. 2018
- [31] M. A. Elmansouri, J. Ha, and **D.S. Filipovic**, *Multioctave Antenna Array for Simultaneous Transmit and Receive Applications*, ACES 2018, Denver, CO, Mar. 2018
- [32] W. N. Kefauver, and **D.S. Filipovic**, *Even-Arm Modulated Arm Width Spiral Properties*, ACES 2018, Denver, CO, Mar. 2018
- [33] R. N. Pack, G. Lasser and **D. S. Filipovic**, *Improvement of MAW Spiral Measurements by Filtering Spherical Modes in the Far Field*, IEEE Conference on Antenna Measurements & Applications (CAMA), Tsukuba, Ibaraki, Japan, Nov. 2017.
- [34] K. V. Hoel; S. Kristoffersen; N. Jastram; **D.S. Filipovic**, *3D printed Rotman lens*, 2017 47th European Microwave Conference (EuMC), Nürnberg, Germany, Oct. 2017.
- [35] E. A. Etellisi, M. Elmansouri, and **D.S. Filipović**, *Antenna Systems for Simultaneous Transmit and Receive (STAR) Applications*, (Invited) IMAPS, vol. 2017, no. 1, pp. 590-594, Riley, NC, Oct. 2017.
- [36] M. Ignatenko; **D. S. Filipovic**, *4-40 GHz conical spiral antenna recessed in a cavity*, IEEE APS/URSI, San Diego, CA, July 2017
- [37] A. Samaiyar; A. H. Abdelrahman; **D.S. Filipovic**, *Simultaneous transmit and receive reflectarray antennas on low cost UAV platforms*, IEEE APS/URSI, San Diego, CA, July 2017
- [38] M. Elmansouri; P. Valaleprasannakumar; E. Tianang; E. Etellisi; **D.S. Filipovic**, *Single and dual-polarized wideband simultaneous transmit and receive antenna system*, IEEE APS/URSI, San Diego, CA, July 2017
- [39] P. V. Prasannakumar; M. A. Elmansouri; **D.S. Filipovic**, *Broadband monostatic simultaneous transmit and receive reflector antenna system*, IEEE APS/URSI, San Diego, CA, July 2017
- [40] B. F. Allen; N. Jastram; **D.S. Filipovic**, *A reactive impedance surface for enhancing antenna isolation on cylindrical platforms*, IEEE APS/URSI, San Diego, CA, July 2017
- [41] J. Cazden; **D.S. Filipovic**, *Wideband amplitude-only direction finding subsystem with conical spirals*, IEEE APS/URSI, San Diego, CA, July 2017
- [42] C. A. M. Hernandez; M. Ignatenko; **D.S. Filipovic**, *On the effects of parasitic horns within tightly packed concave linear arrangements*, IEEE APS/URSI, San Diego, CA, July 2017
- [43] A. H. Abdelrahman; **D.S. Filipovic**, *Full duplex antenna subsystem for handheld radios*, IEEE APS/URSI, San Diego, CA, July 2017
- [44] N. Rahman; G. Lasser; M. Elmansouri; **D.S. Filipovic**, *3-Arm spiral antennas for direction finding applications*, IEEE APS/URSI, San Diego, CA, July 2017
- [45] S. Manafi; M. Al-Tarifi; **D.S. Filipovic**, *Passive approaches for improvement of TX to RX antenna isolation in millimeter wave repeaters*, IEEE APS/URSI, San Diego, CA, July 2017
- [46] J. Ha; **D.S. Filipovic**, *Wide bandwidth and beamwidth flush-mountable planar and pyramidal log-periodic antennas*, IEEE APS/URSI, San Diego, CA, July 2017
- [47] A. Kee; M. Elmansouri; **D.S. Filipovic**, *Circularly polarized pifa array for simultaneous transmit and receive applications*, IEEE APS/URSI, San Diego, CA, July 2017
- [48] E. G. Tianang; M. A. Elmansouri; **D.S. Filipovic**, *Wide bandwidth cavity-backed dual-polarized vivaldi array antenna*, IEEE APS/URSI, San Diego, CA, July 2017
- [49] N. Jastram; C. Andrews; **D.S. Filipovic**, *Design of circular dual and quad ridge horn antennas for millimeter wave applications*, IEEE APS/URSI, San Diego, CA, July 2017
- [50] E. A. Etellisi; M. A. Elmansouri; **D.S. Filipovic**, *Wideband monostatic spiral array for full-duplex applications*, IEEE APS/URSI, San Diego, CA, July 2017
- [51] R. N. Pack; **D.S. Filipovic**, *Design of MAW spiral antennas for direction-of-arrival sensing using the Cramer-Rao bound*, IEEE APS/URSI, San Diego, CA, July 2017

- [52] L. Boskovic; M. Ignatenko; C. Andrews; R. Hasse; **D.S. Filipovic**, *Electro-mechanical analysis of flat radomes for airborne antennas at K/Ka/V-band*, IEEE APS/URSI, San Diego, CA, July 2017
- [53] N. Jastram; **D.S. Filipovic**, *Comparative study of dual-linear versus dual-circular horns for 18 to 45 GHz repeaters*, IEEE APS/URSI, San Diego, CA, July 2017
- [54] M. A. Al-Tarifi; **D.S. Filipovic**, *Multi-layer dielectric rod antenna with stable patterns over decade bandwidth*, IEEE APS/URSI, San Diego, CA, July 2017
- [55] G. Lasser; J. Cazden; **D.S. Filipovic**, *A spiral antenna for amplitude-only direction finding*, IEEE APS/URSI, San Diego, CA, July 2017
- [56] S. Sanghai; L. Boskovic; N. Jastram; **D.S. Filipovic**, *Assembly strategies for millimeter wave horn antennas*, IEEE APS/URSI, San Diego, CA, July 2017
- [57] M. Notaros; M. Ignatenko; **D.S. Filipovic**, *Feed study for a wideband 18 to 45 GHz Luneburg lens antenna*, IEEE APS/URSI, San Diego, CA, July 2017
- [58] C. Andrews; R. Hasse; L. Boskovic; N. Jastram; **D.S. Filipovic**, *On the use of radome materials for a high-power, wideband, millimeter wave antenna*, IEEE APS/URSI, San Diego, CA, July 2017
- [59] D. Lopez, and **D.S. Filipovic**, *On the Design of Millimeter-wave Antennas for Amplitude-Only Direction Finding*, Proceedings of 2016 IEEE Phased Array Conference, Boston, MA, Oct. 2016.
- [60] E. Etellisi, M. Ignatenko, and **D.S. Filipovic**, *Wideband Simultaneous Transmit and Receive (STAR) Circular Array System*, Proceedings of 2016 IEEE Phased Array Conference, Boston, MA, Oct. 2016.
- [61] B. Simakauskas, M. Ignatenko, and **D.S. Filipovic**, *Design of a Linearly Polarized K/Ka/V-band High Power Feed Manifold for Luneburg Lens*, Proceedings of 2016 IEEE Phased Array Conference, Boston, MA, Oct. 2016.
- [62] A. Samiyar, and **D.S. Filipovic**, *Design of a C-band Reflectarray for the Low-Cost UAV Platforms*, 2016 AAS, (10pg), Monticello, IL, Sep. 2016 (Best Student Paper)
- [63] S. Manafi, M. Al-Tarifi, and **D.S. Filipovic**, *45-110 GHz Quad-Ridge Horn Antenna*, IEEE APS/URSI, San Juan, PR, July 2016
- [64] N. Jastram, and **D.S. Filipovic**, *Isolation of Millimeter Wave Antennas over Cylindrical and Rectangular Ground Planes*, IEEE APS/URSI, San Juan, PR, July 2016
- [65] E. Valentin, N. Jastram, and **D.S. Filipovic**, *Impact of a PEC Cylinder on the Performance of a Wideband Dual-Polarized Quad-Ridge Horn Antenna*, IEEE APS/URSI, San Juan, PR, July 2016
- [66] C. Andrews, N. Jastram, and **D.S. Filipovic**, *Gain and H-Plane Beamwidth Stabilized Millimeter Wave Horn Antenna*, IEEE APS/URSI, San Juan, PR, July 2016
- [67] M. Ignatenko, B. Simakauskas, and **D.S. Filipovic**, *Modeling and Design of K/Ka/V-band High Power Feed for the Luneburg Lens*, IEEE APS/URSI, San Juan, PR, July 2016
- [68] P. VPKumar, M. Elmansouri, and **D.S. Filipovic**, *Wideband Dual-Polarized Bi-Static Simultaneous Transmit and Receive Antenna System*, IEEE APS/URSI, San Juan, PR, July 2016
- [69] E. Tianang, M. Elmansouri, and **D.S. Filipovic**, *Flush-Mountable Vivaldi Array Antenna*, IEEE APS/URSI, San Juan, PR, July 2016 (Student Paper Competition Honorable Mention)
- [70] M. Elmansouri, and **D.S. Filipovic**, *Realization of Ultra-Wideband Simultaneous Transmit and Receive Antenna System*, IEEE APS/URSI, San Juan, PR, July 2016
- [71] E. Etellisi, M. Elmansouri, and **D.S. Filipovic**, *Wideband Dual-Mode Monostatic Simultaneous Transmit and Receive Antenna System*, IEEE APS/URSI, San Juan, PR, July 2016 (Student Paper Competition Honorable Mention)
- [72] **D.S. Filipovic**, M. Elmansouri, and E. Etellisi, *On Wideband Simultaneous Transmit and Receive (STAR) With a Single Aperture*, IEEE APS/URSI, San Juan, PR, July 2016 (Invited for Special Session)
- [73] M. AlTarifi, and **D.S. Filipovic**, *Amplitude-Only Direction Finding Using Squinted Stabilized-Pattern Horn Antennas in W-Band*, IEEE APS/URSI, San Juan, PR, July 2016

- [74] D. Lopez, and **D.S. Filipovic**, *Flush Mountable K/Ka Band Amplitude Only Direction Finding System*, IEEE APS/URSI, San Juan, PR, July 2016 (Student Paper Competition Honorable Mention)
- [75] G. Lasser, and **D.S. Filipovic**, *A Wide-Band Spiral Based Amplitude-Only Azimuth Direction Finding System*, IEEE APS/URSI, San Juan, PR, July 2016
- [76] J. Ha, and **D.S. Filipovic**, *Numerical and Experimental Electro-Thermal Characterization of Log-Periodic Antennas*, IEEE APS/URSI, San Juan, PR, July 2016
- [77] R. Smith, M. Ignatenko, and **D.S. Filipovic**, *Design of Small Loop Antennas for On-The-Move HF Manpack Radios*, IEEE APS/URSI, San Juan, PR, July 2016
- [78] M. Notaros, M. Ignatenko, and **D.S. Filipovic**, *Miniaturization of a High-Frequency Dual Linearly Polarized Dipole for Vehicular Communications*, IEEE APS/URSI, San Juan, PR, July 2016.
- [79] B. Allen, M. Ignatenko, and **D.S. Filipovic**, *Low Profile Vehicular Antenna for Wideband High Frequency Communications*, IEEE APS/URSI, San Juan, PR, July 2016 (Student Paper Competition Honorable Mention)
- [80] S. Sanghai, M. Ignatenko, and **D.S. Filipovic**, *Low Profile Wideband Inverted-L Antenna for the M-ATV On-The-Move HF Communication*, IEEE APS/URSI, San Juan, PR, July 2016
- [81] E. Tianang, M. Elmansouri, and **D.S. Filipovic**, *Cavity-Backed Vivaldi Array Antenna*, Proc. 10th European Conference on Antennas and Propagation, Davos, SW Apr. 2016
- [82] G. Lasser, M. Ignatenko, and **D.S. Filipovic**, *Tuning an Electrically Small On-The-Move HF Half-Loop Antenna*, Proc. 10th European Conference on Antennas and Propagation, Davos, SW Apr. 2016
- [83] M. Elmansouri, P. VPKumar, E. Tianang, E. Etellisi, and **D.S. Filipovic**, *0.5-45GHz Simultaneous Transmit and Receive (STAR) Antenna System for Electronic Attack*, GomacTech, Orlando, FL, Mar. 2016
- [84] N. Jastram, and **D.S. Filipovic**, *Design of a Cavity Backed 15:1 Bandwidth Two Arm Spiral Helix Antenna*, ACES 2016, Honolulu, HI, Mar. 2016
- [85] M. Ignatenko, and **D.S. Filipovic**, *Electrically Small Half-Loop for Wideband HF On-The-Move Operation*, ACES 2016, Honolulu, HI, Mar. 2016
- [86] B. Simakauskas, M. Ignatenko, **D.S. Filipovic**, *Phase Center Stabilization of a Wideband Millimeter-wave Horn Antenna for Implementation with a Luneburg Lens* 2015 AMTA Conf., Long Beach, CA, Oct. 2015
- [87] M. Al-Tarifi, S. Manafi, and **D.S. Filipovic**, *Design of Wideband Dual-Polarized Horn Antennas for Space Constrained V- through W-Band Decoy Repeaters* 2015 AAS, (18pg), Monticello, IL, Sep. 2015
- [88] M. Ignatenko, and **D.S. Filipovic**, *Wideband HF Vehicular Antennas for Communication On-The-Move*, 2015 AAS, (18pg), Monticello, IL, Sep. 2015
- [89] J. Ha, M. Elmansouri, and **D.S. Filipovic**, *Frequency, Time, and Thermal Domain Analysis of Planar Bi-Directional Log-Periodic Antenna*, ASIAEM 2015, Jeju Island, KO, Aug. 2015 (best paper award)
- [90] S. Sanghai, M. Ignatenko, and **D.S. Filipovic**, *Two Arm Offset Fed Inverted-L Antenna for Vehicular HF Communications*, IEEE APS/URSI, Vancouver, CA, July 2015
- [91] N. Jastram, M. Elmansouri, and **D.S. Filipovic**, *Multi-octave Cavity-Backed Four-Arm Slot Spiral For Multi-Mode Operation*, IEEE APS/URSI, Vancouver, CA, July 2015
- [92] M. Elmansouri, and **D.S. Filipovic**, *Omnidirectional/Directional TEM Horn Circular Array for Joint Time and Frequency Operation*, IEEE APS/URSI, Vancouver, CA, July 2015
- [93] M. Elmansouri, E. Etellisi, and **D.S. Filipovic**, *Ultra-Wideband Circularly-Polarized Simultaneous Transmit and Receive (STAR) Antenna System*, IEEE APS/URSI, Vancouver, CA, July 2015
- [94] J.M. Vargas, R.R. Solis, M. ELmansouri, and **D.S. Filipovic**, *Analysis of a UWB Cavity Backed Compound Power Archimedean Spiral Slot Antenna for Body Centric Wireless Communications Applications*, IEEE APS/URSI, Vancouver, CA, July 2015

- [95] J. Ha, M. Elmansouri, and **D.S. Filipovic**, *Wideband, Loaded, Low Profile, Small Diameter Monocone Antenna*, IEEE APS/URSI, Vancouver, CA, July 2015
- [96] E. Tianang, and **D.S. Filipovic**, *A Dipole Antenna System for Simultaneous Transmit and Receive*, IEEE APS/URSI, Vancouver, CA, July 2015
- [97] E. Etellisi, M. Elmansouri, and **D.S. Filipovic**, *Wideband Simultaneous Transmit and Receive (STAR) Bi-Layer Circular Array*, IEEE APS/URSI, Vancouver, CA, July 2015
- [98] B. Allen, M. Ignatenko, and **D.S. Filipovic**, *Capacitively Loaded High Frequency Monopole Antenna for Vehicular Communications*, IEEE APS/URSI, Vancouver, CA, July 2015
- [99] W.N. Kefauver, and **D.S. Filipovic**, *Non-Complementary Modulated Arm Width Spiral Design and Application*, ACES 2015, Williamsburg, VA, 2015
- [100] N. Jastram, **D.S. Filipovic**, *Development of Integrated High Power Passive Front-Ends for Towed Decoys*, GomacTech, 2015, St Louis, MO
- [101] S. Sanghai, M. Ignatenko, K. Kim, and **D.S. Filipovic**, *Scaled Model Measurements of HF Antenna for Vehicular Platforms*, 2014 AMTA, (6pg), Tuscon, AZ, Oct. 2014.
- [102] J. Ha, and **D.S. Filipovic**, *Wideband Antennas for Towed Decoy Systems*, 2014 AAS, (12pg), Monticello, IL, Sep. 2014.
- [103] M. Ignatenko, and **D.S. Filipovic**, *Design of Low-Profile HF Antennas for Diverse Vehicular Platforms*, 2014 AAS, (15pg), Monticello, IL, Sep. 2014.
- [104] M. Elmansouri, and **D.S. Filipovic**, *Design of Combined Antennas using Spherical Modes*, 2014 AAS, (12pg), Monticello, IL, Sep. 2014.
- [105] M. Elmansouri, and **D.S. Filipovic**, *Miniaturization of TEM Horn Antenna Using Spherical Modes Analysis*, Proceedings 2014 AMEREM, (4pg), Albuquerque, NM, July 2014.
- [106] N. Jastram, and **D.S. Filipovic**, *Design of Dual-Polarized Millimeter Wave Constant EIRP Front-End for Towed Decoy Platforms*, Proceedings 2014 IEEE ICEAA, (2pg), Aruba, July, 2014.
- [107] M. Elmansouri, J. Bargerion, and **D.S. Filipovic**, *Ultra-Wideband Spiral-Helix Antenna Array*, Proceedings 2014 IEEE APS/URSI, (2pg), Memphis, TN, July, 2014.
- [108] M. Elmansouri, R. Sammeta, and **D.S. Filipovic**, *Joint Frequency- and Time-Domain Characterization of Planar Log-Periodic Antennas*, Proceedings 2014 IEEE APS/URSI, (2pg), Memphis, TN, July, 2014.
- [109] M. Elmansouri, and **D.S. Filipovic**, *Reduced-Size TEM Horn for Short-Pulse High-Power Electromagnetic Systems*, Proceedings 2014 IEEE APS/URSI, (2pg), Memphis, TN, July, 2014.
- [110] D.G. Lopez, M. Ignatenko, and **D.S. Filipovic**, *RF Exposure Inside and Outside Vehicles*, Proceedings 2014 IEEE APS/URSI, (2pg), Memphis, TN, July, 2014.
- [111] J. Ha, and **D.S. Filipovic**, *High Efficiency Cavity-Backed Log-Periodic Antenna*, Proceedings 2014 IEEE APS/URSI, (2pg), Memphis, TN, July, 2014.
- [112] N. Jastram, and **D.S. Filipovic**, *Wideband Multibeam Millimeter Wave Arrays*, Proceedings 2014 IEEE APS/URSI, (2pg), Memphis, TN, July, 2014. (1st Place Best Student Paper; 149 entries)
- [113] M. Ignatenko, and **D.S. Filipovic**, *Application of Characteristic Mode Analysis to HF Low Profile Vehicular Antennas*, Proceedings 2014 IEEE APS/URSI, (2pg), Memphis, TN, July, 2014.
- [114] M. Al-Tarifi, and **D.S. Filipovic**, *All-PCB Transmission Line with Low Loss and Dispersion up to Ka Band*, Proceedings 2014 IEEE APS/URSI, (2pg), Memphis, TN, July, 2014.
- [115] R. Sammeta, and **D.S. Filipovic**, *A Low-Profile Sinuous Antenna*, Proceedings 2014 IEEE APS/URSI, (2pg), Memphis, TN, July, 2014. (Student Paper Finalist)
- [116] S. Sanghai, M. Elmansouri, R. Sammeta, J. Bargerion, and **D.S. Filipovic**, *Failure Mechanisms of Spiral-Helix Antenna under High Power Conditions*, Proceedings 2014 IEEE APS/URSI, (2pg), Memphis, TN, July, 2014.
- [117] S. Sanghai, M. Ignatenko, and **D.S. Filipovic**, *Vehicle Mounted Inverted-L Antenna for High-Frequency (HF) Communications*, Proceedings 2014 IEEE APS/URSI, (2pg), Memphis, TN, July, 2014.

- [118] S. Shrestha, M. Ignatenko, and **D.S. Filipovic**, *Combined Dipole-Multiturn Loop for Vehicle-Based High-Frequency (HF) Communications*, Proceedings 2014 IEEE APS/URSI, (2pg), Memphis, TN, July, 2014.
- [119] T. Samson, M. Ignatenko, and **D.S. Filipovic**, *The Comparison of Mounting Approaches for Vehicular Multi-Arm Spiral Antennas*, Proceedings 2014 IEEE APS/URSI, (2pg), Memphis, TN, July, 2014.
- [120] M. Elmansouri, and **D.S. Filipovic**, *On the Use of Spiral Antenna Arrays for Short-Pulse Ultra-Wideband Applications*, Proceedings of 2013 IEEE Phased Array Conference, (2nd place student paper contest), (6 pg), Boston, MA, Oct. 2013.
- [121] N. Sutton, K. Hasset, and **D.S. Filipovic**, *Feasibility of Near-Field Pattern Characterization for V-band Antennas*, Proceedings 2013 AMTA, (6pg), Columbus, OH, Oct. 2013.
- [122] R. Sammeta, and **D.S. Filipovic**, *4-Arm Wideband Log-Periodic Antenna and its High Power Measurements*, Proceedings 2013 AMTA, (4pg), Columbus, OH, Oct. 2013.
- [123] N. Jastram, and **D.S. Filipovic**, *Design and Performance of a W Band Rotman Lens*, Proceedings of 2013 AAS, (Best Student Paper), (12 pg), Monticello, IL, Sept. 2013.
- [124] M. Radway, and **D.S. Filipovic**, *Computational Design of a Flush-Mountable Gain-Stabilized 2.5:1 Bandwidth Ridged Horn Antenna*, Proceedings 2013 IEEE APS/URSI, (2pg), Orlando, FL, July, 2013.
- [125] N. Jastram, and **D.S. Filipovic**, *Parameter Study and Design of W-band Micromachined Tapered Slot Antenna*, Proceedings 2013 IEEE APS/URSI, (2pg), Orlando, FL, July, 2013. (Honorable mention)
- [126] M. Elmansouri, and **D.S. Filipovic**, *Time and Frequency Domain Analysis and Design of Circularly-Polarized Spiral Antenna Arrays*, Proceedings 2013 IEEE APS/URSI, (2pg), Orlando, FL, July, 2013. (Honorable mention)
- [127] J. Ha, and **D.S. Filipovic**, *Simple and Low-Cost Wideband Omnidirectional Antenna on Metallic Cylinders*, Proceedings 2013 IEEE APS/URSI, (2pg), Orlando, FL, July, 2013.
- [128] S. Gupta, M. Perez, J. Mruk, M. Radway, and **D.S. Filipovic**, *Decade Bandwidth Bidirectional Planar Log-Periodic Antennas and their Performance under Low and High Continuous-Wave (CW) Input Power*, Proceedings 2013 IEEE APS/URSI, (2pg), Orlando, FL, July, 2013.
- [129] M. Elmansouri, and **D.S. Filipovic**, *Ultra-Wideband Dual-Circularly Polarized Array with Simple Cost-Effective Feeding Network*, Proceedings 2013 IEEE IMS, (3pg), Seattle, WA, June 2013.
- [130] M. Ignatenko, **D.S. Filipovic**, *Modeling of Wave Propagation above Random Surfaces Using Externally Controlled Commercially Available Software Tools*, Proceedings 2013 Applied Electromagnetics Society Conf., (6pg), Monterey, CA, April, 2013.
- [131] M. Radway, and **D.S. Filipovic**, *Ridge Waveguide Component Suite for 18-45 GHz Electronic Attack*, Proceedings 2012 GomacTech, (3pages), Las Vegas, NV, Mar. 2013.
- [132] M. Radway, N. Sutton, and **D.S. Filipovic**, *On the Development of 18-45 Ghz Antennas for Towed Decoys and Suitability Thereof for Far-field and Near-field Measurements*, Proceedings 2012 AMTA, (6pg), Seattle, WA, Oct. 2012.
- [133] R. Sammeta, and **D.S. Filipovic**, *Four Arm Sinuous Antenna and Its High-power Measurement*, Proceedings 2012 AMTA, (4pg), Seattle, WA, Oct. 2012.
- [134] J. Barger, and **D.S. Filipovic**, *Wideband and High-power Performance of Printed Spiral Antennas*, Proceedings 2012 AMTA, (6pg), Seattle, WA, Oct. 2012.
- [135] **D.S. Filipovic**, R. Sammeta, J. Barger, M. Elmansouri, J. Mruk, M. Perez, S. Gupta, and M. Radway, *High-power Performance of Planar Spiral, Sinuous and Log-Periodic Antennas*, Proceedings 2012 AAS, (30pgs), Monticello, IL, Sept. 2012.
- [136] M. Ignatenko, T. Samson, and **D.S. Filipovic**, *On Reducing Visual Signature of Vehicular Antennas*, Proceedings 2012 AAS, (14pgs), Monticello, IL, Sept. 2012.

- [137] M. Elmansouri, and **D.S. Filipovic**, *On the Use of Spiral Antennas in Ultra-Wideband Communication Links*, Proceedings IEEE UWB, (4pg), Syracuse, NY, Sep. 2012. (3rd place – Student paper competition)
- [138] J. Bargeron, and **D.S. Filipovic**, *5:1 Wideband High-Power Spiral-Helix Antenna*, Proceedings 2012 IEEE APS/URSI, (2pg), Chicago, IL, July, 2012. (honorable mention)
- [139] R. Sammeta, and **D.S. Filipovic**, *Quasi-Frequency Independent High Power Sinuous Antenna*, Proceedings 2012 IEEE APS/URSI, (2pg), Chicago, IL, July, 2012.
- [140] M. Radway, and **D.S. Filipovic**, *Performance of Two Linearly-Polarized Broadband Horns on a Small Circular Platform*, Proceedings 2012 IEEE APS/URSI, (2pg), Chicago, IL, July, 2012.
- [141] N. Sutton, and **D.S. Filipovic**, *V-band Monolithically Inegrated Four-arm Spiral Antenna and Beamforming Network*, Proceedings 2012 IEEE APS/URSI, (2pg), Chicago, IL, July, 2012.
- [142] N. Jastram, and **D.S. Filipovic**, *Monolithically Integrated K/Ka Array-Based Direction Finding Subsystem*, Proceedings 2012 IEEE APS/URSI, (2pg), Chicago, IL, July, 2012.
- [143] M. Elmansouri, and **D.S. Filipovic**, *Two-Arm Power Spiral Antennas*, Proceedings 2012 IEEE APS/URSI, (2pg), Chicago, IL, July, 2012.
- [144] M. Elmansouri, and **D.S. Filipovic**, *Effect of Spiral Antennas Pulse Distortion on the Performance of UWB-IR Systems*, Proceedings 2012 IEEE APS/URSI, (2pg), Chicago, IL, July, 2012.
- [145] N. Sutton, M. Oliver, and **D.S. Filipovic**, *Wideband 15-50GHz Symmetric Multi-Section Coupled Line Quadrature Hybrid Based on Surface Micro-Machining Technology*, Proceedings 2012 IEEE IMS, (3pg), Montreal, CA, June 2012.
- [146] **D.S. Filipovic**, N. Sutton, N. Jastram, and M. Radway, *Microwave and Millimeter Wave Front-End Subsystems for Wideband Direction Finding and Towed Decoys*, Proceedings 2012 GomacTech, (4pages), Las Vegas, NV, Mar. 2012.
- [147] **D.S. Filipovic**, J. Mruk, J. Bargeron, and R. Sammeta, *High-Power Frequency Independent Antennas for Multiple Octave Wideband Electronic Attack*, Proceedings 2012 GomacTech, (4pages), Las Vegas, NV, Mar. 2012.
- [148] M. Elmansouri, M. Radway, and **D.S. Filipovic**, *Evaluating the Time Domain Performance of Spiral Antennas Using Near Field Measurements*, Proc. 2011 AMTA Conf., (5pg), Denver, CO, Oct., 2011.
- [149] M. Radway, and **D.S. Filipovic**, *Low-Cost Wideband 18-40GHz Antenna with Consistent and Wide Radiation Patterns*, Proceedings of 2011 AAS, (Best Student Paper), (6 pg), Monticello, IL, Sept. 2011.
- [150] N. Jastram, N. Sutton, and **D.S. Filipovic**, *Wideband Array-Based Monopulse Direction Finding Systems*, Proceedings of 2011 AAS, (13 pg), Monticello, IL, Sept. 2011.
- [151] R. Sammeta, and **D.S. Filipovic**, *Analysis, Design, and Measurements of Dual-Polarized Sinuous Antennas*, Proceedings of 2011 AAS, (21 pg), Monticello, IL, Sept. 2011.
- [152] J. Mruk, K. Kim, Y. Saito, M. Radway, and **D.S. Filipovic**, *A Directly Fed Ku- to W-Band 2-Arm Archimedean Spiral Antenna*, Proc. 2011 IEEE Europ. Microw. Symp., (4pg), Manchester, UK, Sept. 2011.
- [153] M. Elmansouri, and **D.S. Filipovic**, *Mode 2 Four-Arm Spiral Antennas as Pulse Radiators*, Proc. 2011 IEEE Antennas Propag. Int. Symp., (4pg), Spokane, WA, July, 2011.
- [154] H. Zhou, N. Sutton, and **D.S. Filipovic**, *W-Band Endfire Log Periodic Dipole Array*, Proc. 2011 IEEE Antennas Propag. Int. Symp., (4pg), Spokane, WA, July, 2011.
- [155] H. Zhou, N. Sutton, and **D.S. Filipovic**, *Wideband W-band Patch Antenna*, Proceedings 5th European Antennas and Propagation Conference, (4 pages), Rome, IT Apr. 2011.
- [156] M. Elmansouri, **D.S. Filipovic**, *On the Dispersive Properties of Planar Spiral Antennas*, Proceedings 2011 Applied Electromagnetics Society Conf., (6pg), Williamsburg, VA, March, 2011.

- [157] **D.S. Filipovic**, J. Mruk, N. Sutton, H. Zhou, and K. Kim, *Wideband Antennas for Millimeter Wave Applications*, Proceedings 2011 GomaticTech, (4pages), Orlando, FL, Mar. 2011.
- [158] N. Sutton, **D.S. Filipovic**, *Design of a K- Thru Ka-band Modified Butler Matrix Feed for a 4-Arm Spiral Antenna*, Proceedings of Loughborough Antennas & Propagation Conference 2010, Loughborough, UK, (4pg), Nov. 2010.
- [159] M.T. Wallis, A. Imtiaz, S-H. Lim, P. Kabos, K. Kim, P. Rice, and **D.S. Filipovic**, *Broadband Measurements of Nanofiber Devices: Repeatability and Random Error Analysis*, Proc. 2010 ARFTG, (6pg), Clearwater Beach, FL, 2010.
- [160] M. J. Radway and **D.S. Filipovic**, *Multi-functional Broadband Arrays for UHF Through S-Band Electronic Warfare*, Proc. 2010 IEEE Int. Symp. Phased Array Syst. Tech., (4pg), Waltham, MA, Oct. 2010.
- [161] W. Kefauver; T. Cencich; **D. Filipovic**, *Four-Arm Modulated Arm Width Spiral Antennas for Simultaneous Omni-Polarized RF Emitter Sensing and Determination of the Angle of Arrival*, 32nd ESA Antenna Workshop on Antennas for Space Applications, (6pg), Noordwijk, Netherlands, Oct. 2010.
- [162] K. Kim, P. Rice, T.M. Wallis, S-H. Lim, A. Imtiaz, P. Kabos, **D.S. Filipovic**, *Contactless Approaches for RF Characterization of Metallic Nanowires*, Proc. 2010 IEEE Europ. Microw. Symp., (4pg), Paris, FR, Sept. 2010.
- [163] M. Elmansouri, and **D.S. Filipovic**, *Time Domain Characterization of Equiangular and Archimedean Spiral Antennas*, Proceedings of 2010 AAS, (Student Paper Finalist), (12 pg), Monticello, IL, Sept. 2010.
- [164] M. Elmansouri, and **D.S. Filipovic**, *Characterization of Pulse Distortion and Dispersion of Spiral Antennas*, Proceedings of 2010 IEEE ICWITS, (4pg), Honolulu, HI, Sept. 2010.
- [165] H. Zhou, and D.S. Filipovic, *Optical Dielectric Rod Antenna for On-chip Communications*, Proc. 2010 IEEE Ant. Propagat. Symp., (4pg), Toronto, ON, July, 2010.
- [166] M. J. Radway and **D.S. Filipovic**, *Adaptive Pattern Nulling Method for Multi-Armed Spiral Antennas*, (Student Paper Finalist), Proc. 2010 IEEE Antennas Propag. Int. Symp., (4pg), Toronto, ON, July, 2010.
- [167] K. Kim, P. Rice, P. Kabos, and **D.S. Filipovic**, *Full-wave evaluation of carbon nanotubes as microwave interconnects*, Proceedings of 2010 IEEE Intl. Symp.EMC, (4pg), Fort Lauderdale, FL, USA, July 2010.
- [168] K. Kim, T.M. Wallis, P. Rice, C-J. Chiang, A. Imtiaz, P. Kabos, and **D.S. Filipovic**, *Modeling and Metrology of Metallic Nanowires with Application to Microwave Interconnects*, Proc. 2010 IEEE Intern. Microw. Symp., (4pg), Anaheim, CA, June 2010.
- [169] N. Sutton, **D.S. Filipovic**, *Modeling and Design of Frequency Independent Antennas for Millimeter Wave Electronic Warfare and UHF Platform Integration*, Proceedings 2010 Applied Electromagnetics Society Conf., (6pg), Tampere, FL, April, 2010.
- [170] J. Mruk, H. Levitt, and **D.S. Filipovic**, *Integrated Wideband Millimeter-Wave Passive Front-Ends*, Proceedings 2010 GomaticTech, (4pages), Reno, NV, Mar. 2010.
- [171] P. Kasemir, N. Sutton, M. Radway, B. Jeong, T. Brown, and **D.S. Filipovic**, *Wideband Analog and Digital Beamforming*, Proceedings 2009 Telsiks, (4pages), Nis, SE, Oct. 2009.
- [172] J. Mruk, Y. Saito, and **D.S. Filipovic**, *18-110GHz Integrated Planar Log-Periodic Antennas*, Proceedings of 2009 Antenna Application Symposium – AAS, (12 pages), Monticello, IL, Sept. 2009.
- [173] M. Radway, T. Cencich, and **D.S. Filipovic**, *Phase Center Stability of Planar Spiral Antennas*, Proceedings of 2009 AAS, (12 pages), Monticello, IL, 2009.
- [174] N. Sutton, P. Kasemir, M. Radway, and **D.S. Filipovic**, *VHF Through L-band Analog and Digital Modeformers*, Proceedings of 2009 AAS, (15 pages), Monticello, IL, 2009.

- [175] J. McDonald, F. Lalezari, and **D.S. Filipovic**, *Collinear Arrays for JTRS*, Proceedings of 2009 AAS, (10 pages), Monticello, IL, 2009.
- [176] L. Zheng, D. Fay, A. Mickelson, S. Li, M. Vachharajani, **D.S. Filipovic**, W. Park, Y. Sun, *Spectrum: A hybrid nanophotonic—electric on-chip network*, Proceedings 2009 Design Automation Conference (6pages), July 2009.
- [177] J. Oliver, J-M. Rollin, K. Vanhille, S. Barker, C. Smith, A. Sklavounos, **D.S. Filipovic**, S. Raman, *A 3-D Micromachined W-Band Cavity-Backed Patch Antenna Array with Integrated Rectacoax Transition to Waveguide*, Proceedings 2009 International Microwave Symposium (4 pages), Boston, MA, June 2009.
- [178] N. Ehsan, E. Cullens, K. Vanhille, D. Frey, S. Rondineau, R. Actis, S. Jessup, R. Lender, A. Immorlica, D. Nair, **D.S. Filipovic**, and Z. Popovic, *Micro-coaxial Lines for Active Hybrid-Monolithic Circuits*, Proceedings 2009 International Microwave Symposium (4 pages), Boston, MA, June 2009.
- [179] Y. Saito, Y. Lee, S. Rondineau, and **D.S. Filipovic**, *Electromagnetic and Electro-Thermal Modeling and Design of Micromachined Ka-band Rectangular μ -Coaxial Dividers*, Proceedings 2009 Applied Computational Electromagnetics Society-ACES, (4 pages), Monterey, CA, Mar. 2009.
- [180] A. Lalezari, F. Lalezari, and **D.S. Filipovic**, *Calibration and Evaluation of Body Interaction Effects for the Enhancement of a Body-Borne Radio Direction Finding System*, Proceedings 2009 ACES, (4 pages), Monterey, CA, Mar. 2009.
- [181] L. Grimsrud, F. Lalezari, and **D.S. Filipovic**, *Modeling and Design of Dual- and Wide-band Multi-port Circularly Polarized Patch Antennas*, Proceedings 2009 ACES, (4 pages), Monterey, CA, Mar. 2009.
- [182] J. Mruk, H. Zhou, M. Uhm, Y. Saito, and **D.S. Filipovic**, *Wideband mm-wave Log-Periodic Antennas*, Proceedings 3rd European Antennas and Propagation Conference, (4 pages), Berlin, GE Mar. 2009.
- [183] J. Mruk, N. Kefauver, **D.S. Filipovic**, *Band Rejection and Feeder Effects on the Far-Field Purity of Planar Log-Periodic Antennas*, Proceedings of the Antenna Measurements Techniques Association (AMTA) Conference, (4 pages), Boston, MA, Nov. 2008.
- [184] M. Radway, N. Kefauver, **D.S. Filipovic**, *On the Use of Spiral Antennas for Electronic Attack – student paper finalist*, Proceedings of 2008 AAS, (11 pages), Monticello, IL, 2008.
- [185] **D.S. Filipovic**, G. Potvin, D. Fontaine, Y. Saito, J-M. Rollin, Z. Popovic, M. Lukic, K. Vanhille, and C. Nichols, *μ -Coaxial Phased Arrays for Ka-band Communications*, Proceedings of 2008 AAS, (12 pages), Monticello, IL, Sept. 2008.
- [186] A. Lalezari, F. Lalezari, B. Jeong, and **D.S. Filipovic**, *Evaluation of Human Body Interaction for the Enhancement of a Broadband Body-Borne Radio Geolocation System*, Proceedings of 2008 AAS, (18 pages), Monticello, IL, Sept. 2008.
- [187] H. Zhou, **D.S. Filipovic**, *Wideband Patch Antenna with Differential Feed*, Proceedings of 2008 URSI General Assembly - GA, (4 pages), Chicago, IL, Aug. 2008.
- [188] A. Lalezari, F. Lalezari, **D.S. Filipovic**, *Evaluation of a Broadband Radio Direction Finding System for Application to Body-Borne Geolocation*, Proceedings of 2008 URSI GA, (4 pages), Chicago, IL, Aug. 2008.
- [189] N. Kefauver, T. Cencich, **D.S. Filipovic**, *On Applying Far-Field Modal Decomposition for Evaluating the Convergence Between Modeling and Measurements of Modulated Arm Width Spirals*, Proceedings of 2008 URSI GA, (4 pages), Chicago, IL, Aug. 2008.
- [190] J. Mruk, M. Uhm, **D.S. Filipovic**, *Dual-Wideband Log-Periodic Antennas*, Proceedings of 2008 IEEE APS (4pg), San Diego, CA, July 2008.

- [191] L. Grimsrud, F. Lalezari, **D.S. Filipovic**, *Fixed-Beam L-band Array for Space-Based Platforms*, Proceedings of 2008 IEEE APS (4pg), San Diego, CA, July 2008.
- [192] **D.S. Filipovic**, T.P. Cencich, *Modeling of Dual-Polarized Frequency Independent Antennas*, Proceedings of 2008 Applied Computational Electromagnetics Symposium - ACES, (6 pages), Niagara Falls, ON, March, 2008.
- [193] Y. Saito, **D.S. Filipovic**, *Crosstalk Analysis of Micromachined Rectangular Coaxial Lines*, Proceedings of 2008 ACES, (6 pages), Niagara Falls, ON, March, 2008.
- [194] M. Lukic, K. Kim, Y. Lee, Y. Saito, D. Fontaine, G. Potvin, C. Nichols, **D.S. Filipovic**, *Multi-Physics Design and Performance of a Surface-Micromachined Ka-Band Cavity Backed Patch Antenna*, Proceedings of 2007 IEEE International Microwave and Optoelectronic Conference (4pg), Salvador, Br, Oct. 2007.
- [195] N. Kefauver, T. Cencich, **D.S. Filipovic**, *Effects of Modulation Ratio on the Performance of 4-Arm MAW Spirals*, Proceedings of 2007 Antenna Application Symposium (19 pages), Monticello, IL, Sept., 2007.
- [196] K. Vanhille, **D.S. Filipovic**, C. Nichols, D. Fontaine, W. Wilkins, E. Daniels, Z. Popovic, *Balanced Low-Loss Ka-band u-coaxial Hybrids*, Proceedings of 2007 IEEE International Microwave Symposium - IMS (4pg), Honolulu, HW, June 2007.
- [197] M. Buck, N. Kefauver, **D.S. Filipovic**, *Modeling, Design, Fabrication and Performance of Bi-Layer, Mode 2, Four-Arm, Cavity-Backed, Vertically Fed, Spiral Antennas*, Proceedings of 2007 IEEE APS (4pg), Honolulu, HW, June 2007. (*student paper finalist*)
- [198] M. Lukic, **D.S. Filipovic**, *Integrated Cavity-Backed Ka-Band Phased Array Antenna*, Proceedings of 2007 IEEE APS (4pg), Honolulu, HW, June 2007.
- [199] K. Kim, **D.S. Filipovic**, *Electromagnetic Modeling of Carbon Nanotube Interconnects*, Proceedings of 2007 IEEE APS (4pg), Honolulu, HW, June 2007.
- [200] M. Buck, **D. S. Filipovic**, *Planar and Conical Projections of Multifunctional Two-Arm Sinuous Antennas*, Proceedings of 2006 AAS (18 pages), Monticello, IL, Sept., 2006.
- [201] K. Vanhille, D. Fontain, C. Nichols, Z. Popovic, **D.S. Filipovic**, *A Capacitively Loaded Quasi-Planar Ka-Band Resonator*, Proceedings of 2006 IEEE European Microwave Conference (3 pages), Manchester, UK, Sept., 2006.
- [202] **D.S. Filipovic**, et.all., *Modeling, Design, Fabrication and Perfomance of Rectangular micro-Coaxial Lines and Components*, Proceedings of 2006 IEEE IMS (4 pages), San Francisco, June, 2006.
- [203] M. Lukic, **D.S. Filipovic**, *Modeling of Surface Roughness Effects on the Performance of Rectangular micro-Coaxial Lines*, Proceedings of 2006 ACES Conference (6 pages), Miami, FL, March 2006.
- [204] M. Buck, **D.S. Filipovic**, *Analysis and Design of a Multiband, Multipolarized Two-Arm Sinuous Antenna*, Proceedings of 2006 ACES Conference (4 pages), Miami, FL, March 2006.
- [205] J. McDonald, F. Lalezari, **D.S. Filipovic**, *Multi-Octave Broadband Dipole and Monopole Antennas*, 2005 AAS (*student paper finalist*; 29 pages), Monticello, IL, Sept. 2005.
- [206] **D.S. Filipovic**, N. Stutzke, M. Buck, Q. Mu, N. Kefauver, *Unconventional Spiral Antennas and Arrays*, 2005 AAS (30 pages), Monticello, IL, Sept. 2005.
- [207] M. Buck, **D.S. Filipovic**, *Unidirectional Spiral Antenna with Improved Gain and WoW*, Proceedings of 2005 IEEE APS, (4 pages), Washington, DC, June, 2005.
- [208] N. Stutzke, **D.S. Filipovic**, *Broadband Two-Arm Dual-Mode Dual-Polarized Spiral Antenna*, Proceedings of 2005 IEEE APS, (4 pages), Washington, DC, June, 2005. (*student paper finalist*)
- [209] J. McDonald, F. Lalezari, **D.S. Filipovic**, *Design of a Broadband Biconically Offset Fed Thick Dipole*, Proceedings of 2005 IEEE APS, (4 pages), Washington, DC, June, 2005.
- [210] D. Del Rio, R. Rodriguez-Solis, **D.S. Filipovic**, *Ways to Improve Radiation Pattern of LPFSA*, Proceedings of 2005 IEEE APS, (4 pages), Washington, DC, June, 2005.

- [211] Y. Lee, **D.S. Filipovic**, *Combined Full-Wave/ANN Based Modeling of MEMS Switches for RF and Microwave Applications*, Proceedings of 2005 IEEE APS, (4 pages), Washington, DC, June, 2005.
- [212] Y. Lee, Y. Park, F. Niu, and **D.S. Filipovic**, *Artificial Neural Network Based Macromodeling Approach for Two-Port MEMS Resonating Structures*, Proceedings of 2005 IEEE Int. Conf. Networking, Sensing, and Control, (6 pages), Tucson, AZ, 2005.
- [213] Y. Lee, Y. Park, F. Niu, B. Bachman and **D.S. Filipovic**, *Computer Aided Design and Optimization of Integrated Circuits with RF MEMS Devices by an ANN Based Macro-Modeling Approach*, Proceedings of 2005 Int. Conf. Nano Science and Technology, (4 pages), Anaheim, CA, 2005.
- [214] N. Stutzke, N. Kefauver, **D.S. Filipovic**, *2nd-Mode Four-Arm Slot Spiral Antenna*, Proceedings of 2004 Antenna Application Symposium, (26 pages), Monticello, IL, Sept. 2004. (First place- best student paper)
- [215] M. Buck, T. Cencich, J. Burford, **D.S. Filipovic**, *Multi-band, Multi-polarized Sinuous Antennas for Satellite and Terrestrial Applications*, Proceedings of 2004 AAS, (27 pages), Monticello, IL, Sept., 2004.
- [216] M. Buck, J. Burford, **D.S. Filipovic**, *Multiband two arm slot sinuous antenna*, Proceedings of 2004 IEEE APS, (4 pages), Monterey, CA, June, 2004.
- [217] A. Bhobe, T. Cencich, **D.S. Filipovic**, *Broadband Dual-Mode Slot Antenna*, Proceedings of 2003 AAS, (13 pages), Monticello, IL, Sept., 2003.
- [218] A. Bhobe, **D.S. Filipovic**, *Cavity-backed Four-Arm Slot-Like Spiral Antenna for Dual-Mode Operation*, Proceedings of 2003 IEEE APS, (4 pages), Columbus, OH, June 2003.
- [219] **D.S. Filipovic** and J. L. Volakis, *Design of a multi-functional slot aperture for automotive applications*, Proceedings of 2002 IEEE APS, (4 pages), San Antonio, Tx 2002. (1st place – best student paper)
- [220] **D.S. Filipovic** and J. L. Volakis, *Design and Demonstration of a Novel Conformal Slot Spiral Antenna for VHF to L-band Operation*, Proceedings of 2001 IEEE APS, (4 pages), Boston, MA, 2001.
- [221] **D.S. Filipovic**, E. S. Siah, K. Sertel, V. V. Liepa and J. L. Volakis, *A Thin Broadband Cavity Backed Slot Spiral Antenna for Automotive Applications*, Proceedings of 2001 IEEE APS, (4 pages), Boston, MA, 2001.
- [222] **D.S. Filipovic**, M. W. Nurnberger and J. L. Volakis, *Ultra Wideband Slot Spiral with Dielectric Loading: Measurements and Simulations*, Proceedings of 2000 IEEE APS, (4 pages), Salt Lake, UT, 2000.
- [223] **D.S. Filipovic**, L. S. Andersen and J. L. Volakis, *Efficient Modeling and Analysis of Infinite Periodic Antenna Arrays by Tetrahedral FEs*, Proceedings of 1999 IEEE APS, (4 pages), Orlando, FL, 1999.
- [224] T. F. Eibert, **D.S. Filipovic** and J. L. Volakis, *Higher Order Elements And Bases For Computational Electromagnetics*, Proceedings of 1999 International Conference on Electromagnetics in Advanced Applications ICEAA99, Italy, 1999.
- [225] K. Sertel, **D.S. Filipovic**, S. Bindiganavale and J. L. Volakis, *Comparisons of FMM and AIM Compression Schemes in Finite-Element Boundary Integral Implementations for Antenna Modeling*, Proceedings of 1998 ACES, Monterey, CA, 1998.
- [226] **D.S. Filipovic** and B. Milovanovic, *Analysis, Modeling, Designing and Realization of a MMDS Modified Gregorian Antenna*, Proceedings of 1996 International Symposium on Electronics and Telecommunications, Romania 1996.
- [227] **D.S. Filipovic**, B. Milovanovic and I. Dj. Danilov, *Classical and Modified MMDS Yagi-Uda Antennas*, Proceedings of 1996 ANTEM, Canada 1996.
- [228] B. Milovanovic and **D.S. Filipovic**, *Modeling, Analysis, Designing and Realization of MMDS Corner Reflector Antenna*, Proceedings of 1996 ANTEM, Canada 1996.

Short Courses, Tutorials, and Selected Invited Talks

- **D.S. Filipovic**, *Wideband Antenna Systems*, 2019 International Microwave Symposium, Invited Talk for Short Course of Full-Duplex Systems, Boston, MA, June 2019.
- **D.S. Filipovic**, *Additive Manufacturing for Wideband Millimeter Wave Decoys*, Invited Talk at the 2019 MITRE Additive Manufacturing Workshop, Washington, DC, May 2019.
- **D.S. Filipovic**, *Antenna Technologies for Simultaneous Transmit and Receive*, Invited Seminar at the Colorado School of Mines, Golden, CO, Mar. 2019.
- **D.S. Filipovic**, *Antenna Technologies for Achieving Spectrum Dominance – Part 4*, Invited Seminar at the Lockheed Martin Space Systems, CO, Jan. 2019.
- **D.S. Filipovic**, *Antenna Technologies for Achieving Spectrum Dominance*, Denver Chapter of AOC, Invited Talk, Oct. 2018.
- E. Etellisi, M. Elmansouri, and **D.S. Filipovic**, *Antenna Systems for Simultaneous Transmit and Receive (STAR) Applications*, Invited Talk at the 50th International Symposium on Microelectronics in Raleigh, NC, Oct. 2017.
- **D.S. Filipovic**, *Simultaneous Transmit and Receive – Do Antennas Matter?*, AMTA, Rocky Mountain Node Invited Talk, Feb. 2016
- **D.S. Filipovic**, *Frequency Independent Antennas: Over a Half Century Journey of Bandwidth Unlimited Dreams*, 2015 Applied Computational Electromagnetics Society Conference, Plenary Talk, Wilmington, VA, Mar. 2015.
- **D.S. Filipovic**, *Antenna Technologies for Spectrum Sensing And Control from UHF Through W-Band*, Featured Presentation, 2014 Antenna Systems Conference, Las Vegas, NV, Nov. 2014.
- **D.S. Filipovic**, *Antenna Technologies for Wideband Millimeter-wave EA and ESM Systems*, 50th Association of Old Crews (AOC) Conference, Invited Talk, Washington, DC, Oct. 2013.
- **D.S. Filipovic**, *Electronic Attack with Frequency Independent Antennas*, 50th Association of Old Crews (AOC) Conference, Invited Talk, Washington, DC, Oct. 2013.
- **D.S. Filipovic**, *Frequency Independent Antennas – Perceptions and Reality of Engineering Thereof*, IEEE APS/URSI Conference, Invited Talk, Orlando, FL, July 2013.
- **D.S. Filipovic**, *Microwave and Millimeter Wave Front-End Subsystems for Wideband Direction Finding and Towed Decoys*, GOMACTech Conference, Invited Talk, Las Vegas, NV, Mar. 2012.
- **D.S. Filipovic**, *Wideband Antennas for Electronic Warfare*, Military Antenna Conference, Invited Talk, Washington DC, Sept. 2011.
- **D.S. Filipovic**, *Antennas – on Academic Highway*, 2010 IEEE Phased Array Conf., Recruiting Event for High School, Undergraduate and Graduate Students, Waltham, Oct. 2010.
- **D.S. Filipovic**, *UWB Antennas for VHF to THz Electronic Warfare*, 2010 Electronic Warfare Conference, Invited Talk, Washington DC, Mar. 2010.
- **D.S. Filipovic**, K. Vanhille, *Monolithic Rectangular Coaxial Lines, Components and Systems for Commercial and Defense Applications*, Half-Day Tutorial, IASTED, Baltimore, MD, 2008.
- **D.S. Filipovic**, C. Nichols, *Microcoaxial Lines: Theory, Design and CEM Lab*, Full-Day Short Course with Laboratory Component, IEEE IMS, Honolulu, HI, 2007.

FUNDING HISTORY

Received Research Grants and Contracts

- [1] **LGS/CACI**, *Tightly Coupled Antenna Arrays – phase 2*, Duration 1/20-12/20. Principal Investigator. (57k, 100%)
- [2] **L3-Communications**, *Millimeter Wave Phased Array Aperture (Phase 3)*, Duration, 12/19-12/20. Principal Investigator (297k, 100%)
- [3] **Custom Microwave Inc.**, *Ku-Band Microstrip Patch Array*, Duration, 5/20-2/20. Principal Investigator (65k, 100%)

- [4] **L3-Communications**, *High-power Spiral (Phase 2)*, Duration, 9/18-11/19. Principal Investigator (197k, 100%)
- [5] **LGS/CACI**, *Tightly Coupled Antenna Arrays – phase 1*, Duration 1/19-12/19. Principal Investigator. (50k, 100%)
- [6] **Nortrhop Grumman**, *Ku-Band Microstrip Patch Array*, Duration, 9/18-12/18. Principal Investigator (65k, 100%)
- [7] **L-3 Randtron**, *Multi-arm, Multi-mode Frequency Independent Antennas*, Duration, 9/18-8/19. Principal Investigator (96k, 100%)
- [8] **Lockheed Martin**, *X-band STAR Phased Array*, Duration, 10/18-11/19. Principal Investigator. (130k, 100%)
- [9] **Leidos/NRL**, *18-40GHz Antenna*, Duration 5/18-5/19, Principal Investigator. (272k, 100%)
- [10] **S2 Corp./NSC**, *Antennas for Wideband Electromagnetic Spectrum Situational Awareness*, Duration 10/17 – 9/20, Principal Investigator. (893k, 100%)
- [11] **Leidos/NRL**, *MEPS Demonstrator*, Duration 9/17-12/17, Principal Investigator. (25k, 100%)
- [12] **Lockheed Martin**, *STAR Super-cell for Phased Array*, Duration, 8/17-8/18. Principal Investigator. (100k, 100%)
- [13] **ONR**, *High Directivity STAR Apertures with Fixed and Agile Beams at Millimeter Waves*, 8/17-8/20, Principal Investigator. (870k, 100%)
- [14] **Leidos/NRL**, *4-40GHz Antenna System*, Duration, 5/17-4/18, Principal Investigator. (500k, 100%)
- [15] **ARO**, *Full-Duplex Antenna Study*, Duration, 5/17-2/18, Principal Investigator. (100k, 100%)
- [16] **Leidos/NRL**, *Wide Bandwidth MMW Antennas*, Duration 9/16-2/17, Principal Investigator. (272k, 100%)
- [17] **LGS**, *700-2700MHz Angle of Arrival*, Duration 5/16-2/17. Principal Investigator. (48k, 100%)
- [18] **First RF**, *Compact Direction Finder Antenna*, 10/16-2/17, Principal Investigator. (40k, 100%)
- [19] **ONR**, *Circulator in Aperture (CIA)*, Duration 3/15-2/18. Principal Investigator. (1,340k 100%)
- [20] **ONR**, *Flexible RF System for Space Constrained Decoys*, Duration 3/15-2/18. Principal Investigator, Prof. Z. Popovic is co-PI. TriQuint is sub to CU. (1,196.4k ~55% share)
- [21] **Lockheed Martin**, *STAR Super-cell*, Duration, 4/16-11/16. Principal Investigator. (70k, 100%)
- [22] **S2 Corporation**, *20-40GHz DF Antenna*, Duration 12/15-4-16. Principal Investigator. (45k, 100%)
- [23] **LGS**, *700-2700MHz Dual-mode Spiral Antenna*, Duration 1/15-7/15. Principal Investigator. (95k, 100%)
- [24] **BAE Systems**, *Full Spectrum Staring ES Receiver with Instantaneous DF*, Duration 1/16-6/18. Principal Investigator. (Selected for Funding; 600k 100%)
- [25] **NRL**, *SPEAR – Signal Processing Electronic Attack RFIC*, Duration 7/15-6/18. Principal Investigator. (1,41k 100%)
- [26] **Leidos/NRL** *MEPS Demonstrator*, Duration 7/15-2/17, Principal Investigator. (400k 100%)
- [27] **NRL**, *An 18-45 GHz Decoy for Defense against Millimeter Wave Guided Anti-Ship Missiles*, Duration 3/16-2/18, Principal Investigator. (993k 100%)
- [28] **ONR**, *High-Power Subhyperband Antennas and Arrays*, Duration 6/13-6/16. Principal Investigator. (699.4k 100%)
- [29] **ONR**, *Low Profile HF Antennas for Vehicles on the Move*, Duration 6/13-8/16. Principal Investigator. (906.8k 100%)
- [30] **ONR**, *Enabling Technologies for High-Power Wideband Millimeter-wave Space-Constrained Platforms*, Duration 8/11-12/14. Principal Investigator. (691.8k 100%)
- [31] **ONR**, *Concealed Electronic Attack Concept*, Duration 1/12-6/14. Principal Investigator. (326.7k, 100%)
- [32] **NRL**, *Dual-Wideband Millimeter Wave Antenna Development*, Phase 2, 11/10-5/11. Principal Investigator. (25k, 100%)

- [33] **ONR**, *Integrated Millimeter-Wave Direction Finding Sub-Systems and Dual-Polarized Antennas*, Duration 10/10-4/14. Principal Investigator. (1,043.4k 85% share, 15% to CU's subcontract – Nuvotronics)
- [34] **ONR**, *Multifunctional Arrays and Frequency Independent Antennas (MAFLA)*, Duration 9/10-9/13. Principal Investigator. (1,156k 83% share, 17% to CU's subcontract – Applied EM)
- [35] **NRL**, *Dual-Wideband Millimeter Wave Antenna Development*, 3/10-10/10. Principal Investigator. (50k, 100%)
- [36] **DURIP**, *Comprehensive Antenna Testing*, Duration 4/09-9/10. Principal Investigator. (655.1k, 100%)
- [37] **DARPA/iMINT**, *Electromagnetic Modeling and Metrology of Nanowires and Related Devices with Application to Microwave Interconnects, Sensors, Antennas and Near-Field Microscopy*, Duration 5/09-4/10. Principal Investigator. (50k, 100%)
- [38] **NRL**, *Planar Millimeter Wave Antenna-Diplexer Development*, 6/09-9/09. Principal Investigator. (12k, 100%)
- [39] **ONR**, *Antennas from VHF to THz*, Duration 10/07-11/10. Principal investigator. (871.4k, 77% share, 23% to CU's subcontract-Nuvotronics)
- [40] **NSF**, EMT/NANO: *Broadcast Optical Interconnects for Global Communication in Many-Core Chip-Multiprocessor*, Duration 9/08-9/11, Co- Principal Investigator (PI is Prof. A. Mickelson, Co-PIs Prof. Park, Prof. Vachharajani, Prof. Sheng). (1,050k, 20% share)
- [41] **Lockheed Martin**: *Effect of Lens and Cavity Loading on the Spiral's Phase Center Variation*, Duration: 9/08-12/09. Principal investigator. (20k, 100%)
- [42] **DARPA-MTO 3D-MERFS Program**, Subcontract to BAE Systems, *Analysis and Design of 3D RF Multilayer Interconnects*, Phase III, Duration 8/07– 12/08, Principal Investigator (team members: BAE Systems, Nashua NH, (lead), Rohm and Haas, Blacksburg VA). (174k, 100%)
- [43] **DARPA-TRUST Program**, Subcontract to BAE Systems, prime is Raytheon, Phase I, Duration 1/1/08-12/31/08, Co-Principal Investigator (PI is Prof. Popovic, Collaborator is Prof. Anderson). (400k, 33% share)
- [44] **DARPA-MTO DMT Program**, Subcontract to Rohm and Haas, Phase I, Duration 9/07-9/08, Co-Principal Investigator (PI is Prof. Popovic, team members: BAE Systems, Rohm and Haas). (250k, 5% share)
- [45] **Lockheed Martin**, Denver CO, *Antenna Modeling*, Duration 8/07-11/07, Principal Investigator. (11k, 100%)
- [46] **DARPA-MTO 3D-MERFS Program**, Subcontract to BAE Systems, *Analysis and Design of 3D RF Multilayer Interconnects*, Phase II and IIb, Duration 10/05– 7/07, Principal Investigator (Co-PI was Prof. Popovic; team members: BAE Systems, Nashua NH (lead), Rohm and Haas, Blacksburg VA). (421k, 85% share)
- [47] **NSF**, *Analytical and Numerical Modeling of Double Negative Materials with Application to Antenna Design*, Duration 10/05-10/09, Co-Principal Investigator (PI is Prof. Kuester, and Co-PI is Prof. Piket-May). (270k, 15% share)
- [48] **Navy SBIR**, with Applied EM, Hampton VA, *An Integrated Antenna Set for Software Radios*, Phase II, Duration 10/05-10/07. Principal Investigator. (100k, 100%)
- [49] **DARPA-MTO 3D-MERFS Program**, Subcontract to BAE Systems, *Analysis and Design of 3D RF Multilayer Interconnects*, Phase I, Duration 5/04 – 10/05, Principal Investigator (Co-PI was Prof. Popovic; team members: BAE Systems, Nashua NH, (lead), Rohm and Haas, Blacksburg VA). (250k, 80% share)
- [50] **Lockheed Martin**, Denver, *Wideband Antenna Modeling*, Duration 11/05-12/05. Principal Investigator. (10k, 100%)
- [51] **Motorola** (through CAMPMODE), Plantation FL, *Modeling of MEMS Resonators*, Phase II and III, Duration 5/03-5/05. Principal Investigator. (96k, 100%)

- [52] **Lockheed Martin**, Denver CO, *Two Arm Multimode Spiral*, Duration 1/04-12/04. Principal Investigator. (50k, 100%)
- [53] **Navy SBIR**, with Applied EM, Hampton VA, *An Integrated Antenna Set for Software Radios*, Phase I, Duration 11/03 - 4/04. Principal Investigator. (15k, 100%)
- [54] **Lockheed Martin**, Denver CO, *Low Profile Broadband Multimode Spiral*, Duration 1/03-12/03. Principal Investigator. (50k, 100%)

Gifts and Services

- **CIM**, Longmont, CO, 30k gift to Antenna Research Group, Dec. 2019.
- **NavSys Corporation**, Colorado Springs, CO, 17k for delivery of GPS antennas, 2018.
- **NavAir**, San Diego, CA, 24k for delivery of high- and low-power antennas for Vigilant Hummer 3, 2018.
- **First RF Corporation**, Boulder CO, through University of Colorado Foundation– 20k for supporting activities in the Antenna Research Group, July 2008.
- **First RF Corporation**, Boulder CO, through University of Colorado Foundation– 20k for supporting activities in the Antenna Research Group, August 2005.

ACADEMIC AWARDS AND HONORS

- **D.S. Filipovic**, Fellow of IEEE, elected in January 2019.
- P. Valale Prasannakumar, (student), Second Place - Student Paper Competition (171 papers submitted) at the 2018 IEEE Antennas and Propagation Symposium, Boston, MA, 2018.
- R. Pack, (student), First Place, Les Palkuti Best Student Poster at the 2018 GomacTech Conference, Miami, FL, 2018
- **D.S. Filipovic**, 2017 Outstanding Performance, Dept. ECEE, University of Colorado, May 2018.
- **D.S. Filipovic**, *Hudson Moore, Jr. Endowed Chair*, University of Colorado, January 2017.
- A. Samiyar (student), First Place - Student Paper Competition at the 2016 Antenna Application Symposium, Monticello, IL, Sept. 2016.
- M. Notaros (UG student), First Place – IEEE Region 5 Student Paper Competition, April 2016.
- **D.S. Filipovic**, 2015 Outstanding Research Award, Dept. ECEN, 2015.
- **D.S. Filipovic**, *Charles Victor Schelke Endowed Professor*, University of Colorado, August 2015-December 2016.
- J. Ha (student), First Place – Student Paper Competition at the ASIAEM Symposium, Korea, 2015.
- N. Jastram (student), First Place - Student Paper Competition (149 papers submitted) at the 2014 IEEE Antennas and Propagation Symposium, Memphis, TN, 2014.
- M. Elmansouri (student), Second Place - Student Paper Competition at the 2013 IEEE Phased Array Conference, Boston, MA, Oct. 2013.
- N. Jastram (student), First Place - Student Paper Competition at the 2013 Antenna Application Symposium, Monticello, IL, Sept. 2013.
- **D.S. Filipovic**, *Holland's Teaching Award*, Department of Electrical, Computer, and Energy Engineering, University of Colorado at Boulder, Spring 2013.
- M. Elmansouri (student), Third Place - Student Paper Competition at the 2012 IEEE International Conference on UWB, Honolulu, HI, Sept. 2012.
- **D.S. Filipovic**, *Provost's Faculty Achievement Award*, University of Colorado at Boulder, 9/1/2011.
- M. Radway (student), First Place - Student Paper Competition at the 2011 Antenna Application Symposium, Monticello, IL, 2011.
- J. Mruk (student), First Place – Best Poster Paper at the 2010 GomacTech Conference, Reno, 3/2010.
- **D.S. Filipovic**, *Provost's Faculty Achievement Award*, University of Colorado at Boulder, 7/24/2008.
- **D.S. Filipovic**, *DARPA MTO Recognition for Outstanding Technical Contributions*, 1/16/06.
- M. Buck (student), Winner of the FEKO competition 2006.

- N. Stutzke (student), First Place - Student Paper Competition at the 2004 Antenna Application Symposium, Monticello, IL, 2004.
- **D. S. Filipovic**, J. Volakis, First Place – Student Paper Competition (150 papers submitted) at the 2002 IEEE Antennas and Propagation Symposium, San Antonio, Tx, 2002.
- **D. S. Filipovic**, Nikola Tesla Award, Serbian Academy of Arts and Sciences – Nikola Tesla Foundation, Best Graduation Thesis in Serbia, 1994.
- **D.S. Filipovic**, Serbian Government Fellowship for Young Talents in Engineering and Science, 1994-96.

GRADUATE STUDENT ADVISING

Graduated Students (with a thesis dissertation)

1. Elie Tiang Germain, Apr. 2019, Doctor of Philosophy, Thesis Title: *Simultaneous Transmit and Receive (STAR) Antennas for Geo-Satellites and Shared-Antenna Platforms*. Employed by Lockheed Martin Corp.
2. Prathap Valale Prasanakumar, May 2019, Doctor of Philosophy, Thesis Title: *Wideband Bi-static and Monostatic STAR Antenna Systems*. Employed by Facebook.
3. Sara Manafi, Nov. 2018, Doctor of Philosophy, Thesis Title: *Enabling Ridge Waveguide Technology for Wideband Millimeter-wave Decoys*. Employed by ANSYS Corp.
4. Riley Pack, Nov. 2018, Doctor of Philosophy, Thesis Title: *Wideband Dual-Polarized Digital Direction of Arrival Sensors*. Employed by LGS Corp.
5. Ehab Etellisi, May 2018, Doctor of Philosophy, Thesis Title: *Wideband Monostatic Co-Channel Simultaneous Transmit and Receive (C-STAR) Antenna and Array Systems*. Employed by UCB as research associate.
6. Saurabh Sanghai, May 2018, Doctor of Philosophy, Thesis Title: *Low-Profile, High-Power and Wideband Antennas for Diverse Military Platforms*. Employed by BlueFlux, CO.
7. David Lopez, Nov 2016, Doctor of Philosophy, Thesis Title: *Low-Profile Multiband and Flush-Mountable Wideband Antennas for HF/VHF and K/Ka Band Applications*. Employed by Apple, Cupertino, CA.
8. Jaegeun Ha, May 2016, Doctor of Philosophy, Thesis Title: *High-power Wideband Antennas for EW Systems*. Employed by ANSYS, Chicago.
9. Nathan Jastram, November 2014, Doctor of Philosophy, Thesis Title: *Passive Front-ends for Wideband Millimeter Wave Electronic Attack Warfare*. Employed by Lockheed Martin, CO.
10. Rohit Sammeta, July 2014, Doctor of Philosophy, Thesis Title: *Low-profile Antennas for Wideband Transmit Applications in HF/UHF Bands*. Employed by Amazon, San Jose, CA.
11. Mohamed Ali Elmansouri, May 2013, Doctor of Philosophy, Thesis Title: *Joint Time/Frequency Analysis and Design of Spiral Antennas and Arrays for UWB Applications*. Employed by UCB as Post-doctoral Research Associate.
12. Joseph Mruk, December 2011, Doctor of Philosophy, Thesis Title: *Wideband Monolithically Integrated Front-End Subsystems and Components*. Employed by First RF Corp, Boulder, CO.
13. Hongyu Zhou, November 2011, Doctor of Philosophy, Thesis Title: *Wideband Microwave, Millimeter-wave, and Light-Wave Antennas*. Employed by Oculus, CA.
14. Matthew Radway, August 2011, Doctor of Philosophy, Thesis Title: *Mode Theory of Multi-Armed Spiral Antennas and Its Application to Electronic Warfare Antennas*. Employed by JPL, Pasadena, CA.
15. Neil Kefauver, April 2011, Doctor of Philosophy, Thesis Title: *Multi-Polarized Spiral Antennas for RF Sensing*, Employed by Lockheed Martin, Denver, CO.
16. Kichul Kim, December 2010, Doctor of Philosophy, Thesis Title: *Characterization of Carbon Nanotubes and Nanowires and Their Application*. Employed by Agency for Defense Development, Korea.

17. James McDonald, April 2010, Doctor of Philosophy, Thesis Title: *UWB Dipole-like Antennas and Arrays*, University of Colorado, April 2010. Employed by First RF Corp, Boulder, CO.
18. Yuya Saito, November 2008, Doctor of Philosophy, Thesis Title: *Analysis and Design of Monolithic Coaxial Lines for Minimum Coupling and Integration in Various Passive Devices and Networks*, University of Colorado, November 2008. Employed by ITT Japan.
19. Milan Lukic, October 2007, Doctor of Philosophy, Thesis Title: *Modeling and Design of Microfabricated Rectangular Coaxial Lines and Antennas*, University of Colorado, October 2007. Employed by Google, IL.
20. Michael Buck, April 2007, Doctor of Philosophy, Thesis Title: *Multifunctional, Multipolarized Spiral and Sinuous Antennas*, University of Colorado, April 2007. Employed by Ball Aerospace, CO.
21. Keneth Vanhille, April 2007, Doctor of Philosophy, Thesis Title: *Design and Characterization of Microfabricated Three-Dimensional Millimeter-Wave Components*, University of Colorado, April 2007. (Thesis co-advisor. Principal Advisor was Prof. Zoya Popovic). Employed by Nuvotronics, VA.
22. Yongjae Lee, July 2006, Doctor of Philosophy, Thesis Title: *Design of RF Circuits with Embedded Multi-Physics Models of MEMS Devices*, University of Colorado, July 2006. Employed by Cobham, PA.
23. Bradley, Allan, May 2018: *Isolation Enhancement for Cylindrical Structure Millimeter-Wave Repeaters*, May 2018. University of Colorado, May 2018. Employed by Lockheed Martin, CO.
24. Brian Simakauskas, MSc Thesis Title: *Phase Center Stabilization in a Horn Antenna and its Application in a Luneburg Lens Feed Array*, University of Colorado, Dec. 2015. Employed by MIT Lincoln Lab.
25. Timothy Samson, MSc Thesis Title: *Characterization of Alternative Mounting of Vehicular Antenna Systems Near Real Grounds*, University of Colorado, Dec. 2014. Employed by Lockheed Martin, CO.
26. Arian Lalezari, MSc Thesis Title: *Exploitation of Body Interaction Effects for the Enhancement of a Body-Borne Radio Geolocation System*, University of Colorado, Dec. 2008. Employed by First RF, CO.
27. Lars Grimsrud, MSc Thesis Title: *Low-Loss L-band Fixed Beam Circular Array*, University of Colorado, Dec. 2008. Employed by First RF, CO.
28. Nathan Stutzke, MSc Thesis Title: *Slot Spiral Antennas for Single and Multimode Applications*, University of Colorado, May 2005. Employed by Ball Aerospace, CO.

Current Doctor of Philosophy Students

1. Aman Samaiyar, Research Topic: Reflectarrays.
2. Jake Cazden, Research Topic: Wideband AO DF Antennas.
3. Carlos Mulero, Research Topic: Millimeter Wave Luneburg Lens Antennas.
4. Conrad Andrews, Research Topic: Wideband Phased Array Apertures.
5. Selena Leitner, Research Topic: Wideband Millimeter-Wave Scanning Reflectors.
6. Muhammad Christi, Research Topic (TBD)
7. Gaeron Friedrichs, Research Topic (TBD)
8. Songyi Yen, Research Topic (TBD)
9. Dong-Chan Son, Research Topic (TBD)
10. Theodore Prince, Research Topic (TBD)
11. David Michel, (co-advised with Prof. Psychogiou), Research Topic: 3d Printing RF Systems.

Current Masters of Science Students

Advised Undergraduate and Graduate Students

1. David Mathews, summer 04
2. Katie Noble, Fall 05 / Spring 06 (NSF DNG grant)

3. James Gorman, Fall 06 / Spring 07 (NSF DNG grant)
4. Nathan Sutton, Fall 07 / Spring 08(NSF DNG grant)
5. Maxwell Perez, Fall 10 / Fall 12 (ONR)
6. Matthew Arendall, Fall 14 / Fall 15 (ONR)
7. Richard Smith, Summer 15, Fall 16 (ONR)
8. Bradley Allen, Summer 14, Fall 16 (ONR)
9. Milica Notaros, Summer 15 / Summer 17 (ONR)
10. Sean McKee, Fall 2017 / Fall 2018
11. Merarys Caquias, MS, Fall 2017/Fall 2019.

Post-Doctoral Research Fellows, Professional Research Associates, and Visitors

1. Dr. Prathap VPKumar, June 2019 – Nov. 2019.
2. Dr. Ehab Etellisi, June 2018-Aug. 2019.
3. Prof. Jose Manuel Fernandez, Jan. 2018 - June 2018, Fulbright Visiting Scholar
4. Mr. Ljubodrag Boskovic, Oct. 2016-ongoing (Mechanical Engineer)
5. Dr. Jaegeun Ha, June 2016-Mar. 2018
6. Dr. Nathan Jastram, Jan. 2015-Mar. 2018
7. Dr. Muhannad Al-Tarifi, Sep. 2013-Aug. 2018
8. Dr. Mohamed Elmansouri, Jun. 2013-ongoing
9. Dr. Maxim Ignatenko, Mar. 2012 – Jan. 2019.
10. Dr. Ahmed Abdelrahman, Nov 2016-Dec. 2017
11. Dr. Nahid Rahman, Aug 2016-Nov 2017
12. Dr. Gregor Lasser (with Prof. Z. Popovic), June 2015-Oct 2017
13. Dr. Matthew Radway, Aug. 2011 – Aug. 2013
14. Dr. ChangHoi Ahn, Sep. 2012 – Assoc. Prof., Yeungnam Univ., Visiting Scholar
15. Dr. Shulabh Gupta, Mar. 2012 – Sep. 2012
16. Dr. Bongsik Jeong, Assoc. Prof., Dong-A University, Korea, May 08 / Feb. 09, Visiting Scholar
17. Dr. Manseok Uhm, Post-Doc, Summer 07 / Summer 08, Visiting Scholar

TEACHING

Undergraduate Teaching

- *ECEN 2420, Wireless Electronics for Communications*: Spring 13, 14,15
- *ECEN3400, Electromagnetic Fields and Waves*: Fall 06, 08; Spring 06, 10, 17, 20
- *ECEN3410, Electromagnetic Fields and Transmission*: Spring 04, 12, 13

Graduate Teaching

- *ECEN5134, Electromagnetic Radiation and Antennas*: Fall 02, 03, 05, 07, 09, 11, 14, 15, 17, 19
- *ECEN5154, Computational Electromagnetics*: Spring 03, 05, 07, 09, 20; Fall 12, 15, 16
- *ECEN5004, Advanced Antennas I: Advanced Antenna Modeling*: Fall 04
- *ECEN5104, CAD for Passive Microwave Circuits*: Fall 03, 05, 08, 14; Spring 12

Coursera Teaching

- *ECEN 5134, Electromagnetic Radiation and Antennas*: in preparation

PROFESSIONAL SERVICE

Internal

- Member of the Search Committee for ECEE Dept., Fall 2019-Spring 2020.
- Member of the Search Committee for CEAS Dean, Spring 2020.
- Chair of the Tenure Committee for Prof. D. Psychogiou, 2019.
- Member of the Tenure Committee for Prof. T. Barton, 2019.
- Member of the National Security Working Group (NSWG), Fall 2017-present
- Graduate Director: Fall 2015 – Fall 2017
- Associate Chair for Graduate Studies: Fall 2015 – Spring 2017

- Ex-officio Member of the Executive Committee: Fall 2015 – Fall 2017
- Member of the Graduate Educational Council: Fall 2015 – present
- Member of the College-Wide Best Graduation Thesis Committee: 2015, 2016
- Member of the Department-wide Search Committee: Fall 2014-Spring 2015
- Dean’s FIET committee member: Fall 2014-Fall 2017
- Member of the Executive Committee: 2012 – Spring 2015
- Member of the Graduate Studies Committee: 2003 - present
- Member of the Provost’s Faculty Achievement Award Committee 2012
- Freshman academic advisor: Fall 2005 - present
- Member of the Executive Committee: 2007-2009
- Member of the Undergraduate Curriculum Committee: 2004 – 2007
- Member of the Search Committee – Fall 2004 - Spring 2005
- Member of the Freshman Recruiting Committee – Fall 2006
- Member of the ABET Evaluation Committee for ECEN3400- Fall 2004
- Chaired or co-chaired preliminary exams in electromagnetics 02-14, 18
- Member of the CAMPMODE 2002-2004
- Member of dissertation committees for more than 50 students

External

- Vice-General Chair, IEEE APS/URSI, Denver, 2022
- Track Chair and TPC, 2020 IEEE APS/URSI, Montreal, CA, 2020
- Technical Program Committee, 2019 IEEE APS/URSI, Atlanta, GA, 2019
- External reviewer for tenure cases, 2019.
- Technical Program Committee, Student Paper Competition Chair, 2019 ACES, Miami, FL
- IEEE APS Membership Committee, May 2018 – present
- Associate Editor, IEEE TAP, Sept. 2016 – present
- Technical Program Committee, Exhibition and Sponsorship Chair, 2018 ACES, Denver, CO
- Technical Program Committee, Awards Chair, 2018 GSMM, Boulder, CO
- Vice TPC-Chair 2017 IEEE APS/URSI
- Member of the 2011, 2015, 2016, 2017, 2018 IEEE APS/URSI Technical Program Committee
- Member of the 2014 IEEE Benjamin Franklin Symposium on Microwave and Antenna Sub-Systems Technical Program Committee
- Member of the 2013 AMTA Technical Program Committee
- Student Paper Coordinator 2011 IEEE APS/URSI, Spokane WA
- Student Day Coordinator 2011 AMTA, Denver, CO
- Past member of the editorial board for the International Journal of RF and Microwave Computer Aided Engineering
- Past Associate Editor for the International Journal of Antennas and Propagation
- Past Guest Editor for the Special Issue on UWB Antennas for the Int. Journal of Antennas and Propagation.
- Past Member of the Editorial Board for the IASTED Conference on Antennas, Radar and Wave Propagation
- Organized special session: Antennas for Wireless Communications, URSI Meeting, Boulder, CO 2005
- Session chair at IEEE APS/URSI Symposiums, EuCAP, AAS, ACES, IEEE IMOC, URSI, etc.
- Reviewer for IEEE Transactions Antennas and Propagation, IEEE Antennas Wireless Propagation Letters, IEEE Microwave Wireless Components Letters, IEEE Transactions Nanotechnology, IEEE

Transaction Microwave Theory Techniques, International Journal RF and Microwave Computer Aided Engineering, various government agencies