

# Biographical Sketch

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## Professional Preparation

### Undergraduate:

Universität München, Germany                      Physics, 1987 – 1989

### Graduate:

University of Texas at Austin                      Physics, 1990 – 1991

Universität München, Germany                      Diploma in Physics 1992

Universität München, Germany                      PhD in Mathematics 1995

### Postdoc:

Humboldt-Universität, Berlin, Germany              Mathematics, 1995 – 2001  
Habilitation 2001

Institut de Mathématiques de Luminy,              Mathematics, 2001 – 2002  
Marseille, France

## Appointments

University of Colorado at Boulder,                      Professor,  
Department of Mathematics                      June 2012 – present

University of Colorado at Boulder,                      Associate Professor,  
Department of Mathematics                      August 2007 – May 2012

Goethe-Universität Frankfurt, Germany              Professor (C3), 2004–2007

Goethe-Universität Frankfurt, Germany              Dozent (C2), 2002–2004

## Significant Publications

- [1] M.J. PFLAUM, H. POSTHUMA and X. TANG: *The localized longitudinal index theorem for Lie groupoids and the van Est map*, *Advances in Math.* **270**, 223–262 (2015)  
<http://dx.doi.org/10.1016/j.aim.2014.11.007>
- [2] M.J. PFLAUM, H. POSTHUMA and X. TANG: *The transverse index theorem for proper cocompact actions of Lie groupoids*, *J. of Differential Geometry*, **99**, 443–472 (2015)  
<http://projecteuclid.org/euclid.jdg/1424880982>
- [3] M.J. PFLAUM, H. POSTHUMA and X. TANG: *Geometry of orbit spaces of proper Lie groupoids*, *J. für die Reine und Angew. Math.* **694**, 49–84 (2014), <http://dx.doi.org/10.1515/crelle-2012-0092>
- [4] H. MOSCOVICI, M. LESCH, and M.J. PFLAUM: *Connes-Chern character for manifolds with boundary and eta cochains*, *Memoirs of the AMS*, Vol. **220**, Nr. 1036 (2012),  
<http://dx.doi.org/10.1090/S0065-9266-2012-00656-3>

- [5] M.J. PFLAUM, H. POSTHUMA and X. TANG: *Cyclic cocycles on deformation quantizations and higher index theorems*, Advances in Math. **223**, 1958–2021 (2010),  
<http://dx.doi.org/10.1016/j.aim.2009.10.012>
- [6] J.-P. BRASSELET and M. PFLAUM. *On the homology of algebras of Whitney functions over subanalytic sets*, Ann. Math. **167**, No. 1, 1–52 (2008), <http://dx.doi.org/10.4007/annals.2008.167.1>
- [7] M. PFLAUM. *Analytic and Geometric Study of Stratified Spaces*, Lecture Notes in Mathematics, Bd. **1768**, Springer-Verlag, 2001,  
<http://euclid.colorado.edu/~pflaum/papers/PflAGSSS.ps>

### Recent Work

- [8] *The profinite dimensional manifold structure of formal solution spaces of formally integrable PDE's*,  
 SIGMA **13** (2017), 003, 44 pages  
<https://doi.org/10.3842/SIGMA.2017.003>,  
 joint with B. Güneysu
- [9] *The Grauert–Grothendieck complex on differentiable spaces and a sheaf complex of Brylinski*,  
 Methods and Applications of Analysis Volume 24, Number 2 (2017)  
<http://dx.doi.org/10.4310/MAA.2017.v24.n2.a8>  
 joint with H. Posthuma and X. Tang.
- [10] C. FARSI, M.J. PFLAUM, and CH. SEATON: *Differentiable stratified groupoids and a de Rham theorem for inertia spaces* (2015)  
 arXiv:1511.00371
- [11] B. CHRIESTENSON, and M.J. PFLAUM: *Whitney functions determine the real homotopy type of a semi-analytic set* (2014), arXiv:1403.1627

### Synergistic Activities

- Directing individual studies for Mathematics students at the University of Colorado.
- Associate editor for *Rocky Mountain Journal of Mathematics* in the areas of Differential Geometry and Topology, Global Analysis
- Reviewer for more than four national and international mathematical journals
- Joint organization with X. Tang and A. Kumjian of the *Special Session on Groupoids in Analysis and Geometry* at the AMS Fall Central Sectional Meeting at Washington University, St. Louis in October 2013.
- Joint organization with J. Watts and M. Gekhtman of the *Gone Fishing Meeting* on Poisson-Geometry at the University of Colorado, Boulder, in March 2016