Tagungsprogramm und Vortragsthemen  
“Workshop on Symplectic Field Theory IX”  

October 26, 2018

1 Tagungsprogramm

All lectures take place in the lecture hall T-1001.

Precourse: August 25–26, 2018

- Saturday, August 25
  - 10:00-11:30: Kai Cieliebak - Symplectic Field Theory  
    *Moduli spaces in SFT, algebraic structures, transversality problems.*
  - 13:00-14:30: Alexandru Doicu - Sc-calculus  
    *Sc-Banach spaces, sc-smoothness, reparametrization action, chain rule, sc-manifolds.*
  - 15:00-16:30: Alexandru Doicu - Sc-Fredholm theory  
    *Contraction and basic germs, sc-Fredholm germs, implicit function theorem, sc+ perturbations, transversality and compactness of perturbed solution spaces.*

- Sunday, August 26
  - 10:00-11:30: W. Schmaltz - Retracts  
    *Gluing and antigluing, retractions and retracts, smooth maps between retracts, example: gluing of half-cylinders.*
  - 13:00-14:30: B. Filippenko - M-polyfolds  
    *Local models of M-polyfolds, strong bundles, sc-Fredholm sections (in particular fillings), with or without isotropy.*
  - 15:00-16:30: Z. Zhou - Groupoids and polyfolds  
    *M-polyfolds, polyfolds, bundles, sections via groupoids and functors, multi-section functors and perturbed zero sets.*

Main workshop: August 27–31, 2018

- Monday, August 27
- 8:30-9:00: Registration
- 9:00-10:30: H. Hofer
  *Big Picture I & II*
- 10:30-11:00: Coffee Break
- 11:00-12:30: J. Fish
  *Local-Local Theory I & II*
- 14:30-15:30: M. Jemison
  *Lego Pieces with an application to Deligne-Mumford Spaces with Boundary 1*
- 15:30-16:00: Coffee Break
- 16:00-17:00: D. McDuff
  *Branched Orbifold models of Polyfold Fredholm sections*
- 17:00-18:00: J. Solomon
  *Inductive extension of multisections*
- 18:00-20:00: Reception

- **Tuesday, August 28**

- 9:00-10:30: H. Hofer
  *Big Picture III & IV*
- 10:30-11:00: Coffee Break
- 11:00-12:30: J. Fish
  *From Local-Local to Local I & II*
- 14:30-15:30: M. Jemison
  *Lego Pieces with an application to Deligne-Mumford Spaces with Boundary 2*
- 15:30-16:00: Coffee Break
- 16:00-17:00: B. Filippenko
  *Fiber products of polyfolds and the PSS morphism*
- 17:00-18:00: M. Hutchings
  *Obstruction bundle gluing*
- 19:00-21:00: City Tour

- **Wednesday, August 29**

- 9:00-9:45: J. Fish
  *From Local-Local to Local III*
- 9:45-10:30: H. Hofer
  *From Local to Global I*
- 10:30-11:00: Coffee Break
- 11:00-11:45: H. Hofer
  *From Local to Global II*
- 11:45-12:30: H. Hofer
  Perturbation Theory and Transversality I
- Afternoon Free

- Thursday, August 30
  - 9:00-10:30: H. Hofer
    Perturbation Theory and Transversality II & III
  - 10:30-11:00: Coffee Break
  - 11:00-12:30: H. Hofer
    Perturbation Theory and Transversality IV & V
  - 14:30-15:30: T. Ekholm
    Open Gromov-Witten theory, skein modules, large N duality, and knot contact homology
  - 15:30-16:00: Coffee Break
  - 16:00-17:00: W. Schmaltz
    Gromov-Witten Axioms for Symplectic Manifolds via Polyfold Theory
  - 17:00-18:00: D. Cristofaro-Gardiner
    Refined asymptotics for the ECH spectrum

- Friday, August 31
  - 9:00-10:30: Z. Zhou
    Quotients of polyfolds, equivariant fundamental class and localization.
  - 10:30-11:00: Coffee Break
  - 11:00-12:30: K. Wehrheim
    Family polyfold theory and adiabatic limits