ESI

Erwin Schrödinger International Institute for Mathematics and Physics

universität wien

Week 1 of the Thematic Programme on

"Infinite-dimensional Geometry: Theory and Applications"

January 13 - 17, 2025

organized by

Tomasz Goliński (U of Białystok), Gabriel Larotonda (U of Buenos Aires), Alice Barbara Tumpach (WPI, Vienna), Cornelia Vizman (WU of Timisoara)

- **Monday, January 13th, 2025**

  09:00 – 09:30 **Registration**

  09:30 – 09:40 **Opening**

  09:40 – 10:40 **Mini-Course 1 lecture 1 (1 hour including questions)**: **Madeleine Jotz (U of Würzburg)**
  Lie algebroid cohomology and ideals in Lie algebroids

  10:40 – 11:10 **Coffee or Tea break**

  11:10 – 12:00 **Invited talk (40 min + 10 min questions)**: **Francesco Cattafi (U of Würzburg)**
  PB-groupoids vs VB-groupoids

  12:00 – 14:00 **Lunch break**

  14:00 – 15:00 **Mini-Course 2 lecture 1 (1 hour including questions)**: **Aneta Sliżewska (U of Białystok)**
  Banach-Lie groupoids

  15:00 – 15:30 **Coffee or Tea break**

  15:30 – 16:30 **Mini-Course 3 lecture 1 (1 hour including questions)**: **Eduardo Chiumiento (IAM, Buenos Aires)**
  Operator ideals and infinite-dimensional geometry

- **Tuesday, January 14th, 2025**

  09:00 – 09:30 **Tutorial (30 min)**: **Cornelia Vizman (WU Timisoara)**
  Central extensions in infinite dimensions

  09:30 – 10:30 **Mini-course 1 lecture 2 (1 hour including questions)**: **Madeleine Jotz (U of Würzburg)**
  Lie algebroid cohomology and ideals in Lie algebroids

  10:30 – 11:00 **Coffee or Tea break**

  11:00 – 12:00 **Keynote Talk (1 hour including questions)**: **Anton Alekseev (U Genève)**
  Loop group Hamiltonian actions: a review

  12:00 – 14:00 **Lunch break**

  14:00 – 15:00 **Mini-course 2 lecture 2 (1 hour including questions)**: **Aneta Sliżewska (U of Białystok)**
  Banach-Lie groupoids

  15:00 – 15:30 **Coffee or Tea break**

  15:30 – 16:30 **Mini-Course 3 lecture 2 (1 hour including questions)**: **Eduardo Chiumiento (IAM, Buenos Aires)**
  Operator ideals and infinite-dimensional geometry

- **Wednesday, January 15th, 2025**

  09:00 – 09:30 **Tutorial (30 min)**: **Alice Barbara Tumpach (WPI, TU Vienna and Lille U)** *Banach Poisson-Lie groups*

  09:40 – 09:30 **Invited talk (40 min + 10 min questions)**: **Milan Niestijl (U of Paderborn)** *Holomorphic induction of unitary representations of BCH Fréchet-Lie groups*

  10:30 – 11:00 **Coffee or Tea break**

  11:00 – 12:00 **Keynote Talk (1 hour including questions)**: **Karl-Hermann Neeb (FAU, Erlangen-Nürnberg)** *Covariant projective representations of Hilbert–Lie groups*

  12:00 – 14:00 **Lunch break**

  14:00 – 15:00 **Keynote talk (1 hour including questions)**: **Daniel Beltita (IMAR, Bucharest)** *Leaf spaces in Lie theory*

  15:00 – 15:20 **Coffee or Tea break**

  15:20 – 15:55 **Short talk (20 min + 5 min questions)**: **Eugenia Boffo (Charles U, Prague)** *Geometric and algebraic aspects in the quantization of gauge theories*

  15:55 – 16:45 **Invited talk (40 min + 10 min questions)**: **Florian Zeiser (U Illinois)** *TBA*

  17:00 **Cocktail reception**

- **Thursday, January 16th, 2025**

  09:00 – 10:00 **Mini-Course 1 lecture 3 (1 hour including questions)**: **Madeleine Jotz (U of Würzburg)** *Lie algebroid cohomology and ideals in Lie algebroids*

  10:05 – 10:30 **Short talk (20 min + 5 min questions)**: **Praful Rahangdale (U of Paderborn)** *Correspondence between infinite-dimensional Poisson-Lie groups and Lie bialgebras.*

  10:30 – 11:00 **Coffee or Tea break**

  11:00 – 12:00 **Mini-Course 2 lecture 3**: **Aneta Sliżewska (U of Białystok)** *Banach-Lie groupoids*

  12:00 – 14:00 **Lunch break**

  14:00 – 15:00 **Keynote talk (1 hour including questions)**: **Chiara Esposito (U of Salerno)** *Global Homotopies for HKR Theorems in Differential Geometry*

  15:00 – 15:30 **Coffee or Tea break**

  15:30 – 16:30 **Mini-Course 3 lecture 3 (1 hour including questions)**: **Eduardo Chiumiento (IAM, Buenos Aires)** *Operator ideals and infinite-dimensional geometry*

- **Friday, January 17th, 2025**

  09:00 – 09:50 **Invited talk (40 min + 10 min questions)**: **Christian Blohmann (MPIM Bonn)** *Lie algebras of diffeomorphism groups of non-compact manifolds (part 1)*

  09:55 – 10:20 **Short talk (20 min + 5 min questions)**: **David Miyamoto (MPIM, Bonn)** *Lie algebras of diffeomorphism groups of non-compact manifolds (part 2)*

  10:20 – 10:40 **Coffee or Tea break**

10:40 – 11:05 **Short talk (20 min + 5 min questions)**: **Elwira Wawreniuk (U of Białystok)**
TBA

11:10 – 12:00 **Invited talk (40 min + 10 min questions)**: **Damaris Meier (U of Fribourg)**
Uniformization of metric surfaces

12:00 – 14:00 **Lunch break**

14:00 – 15:00 **Keynote talk (1 hour including questions)**: **Esteban Andruchow (UNGS, Buenos Aires)**
Subspaces with or without a common complement

15:00 – 15:30 **Coffee or Tea break**

15:30 – 16:20 **Invited talk (40 min + 10 min questions)**: **Tilmann Wurzbacher (IECL, Metz)**
TBA

16:20 – 16:30 **Closing**

All talks take place at ESI Boltzmann Lecture Hall!