



Vorträge

Donnerstag, 25. Juni 2015 von 12:00 Uhr – 12:50 Uhr, SR 12, 2. OG., Oskar-Morgenstern-Platz 1, 1090 Wien

**Habilitationsvortrag**

**Dr. Martin Bauer (Fakultät für Mathematik, Universität Wien)**

**„Right-invariant metrics on the diffeomorphism group“**

*Abstract:*

*The interest in right invariant metrics on the diffeomorphism group is fueled by its relations to hydrodynamics. Arnold noted in 1966 that Euler's equations, which govern the motion of ideal, incompressible fluids, can be interpreted as geodesic equations on the group of volume preserving diffeomorphisms with respect to a suitable Riemannian metric. Since then other PDEs arising in physics have been interpreted as geodesic equations on the diffeomorphism group or related spaces. Examples include Burgers' equation, the KdV and Camassa-Holm equations or the Hunter-Saxton equation. Another important motivation for the study of the diffeomorphism group can be found in its appearance in the field of computational anatomy and image matching: the space of medical images is acted upon by the diffeomorphism group and differences between images are encoded by diffeomorphisms in the spirit of Grenander's pattern theory. The study of anatomical shapes can be thus reduced to the study of the diffeomorphism group. Using these observations as a starting point, I will consider the class of Sobolev type metrics on the diffeomorphism group of a general manifold  $M$ . I will discuss the local and global well-posedness of the corresponding geodesic equation, study the induced geodesic distance and present selected numerical examples of minimizing geodesics.*

**Univ. Prof. Andreas Cap**

**Dekan Univ.-Prof. i.R. Dr. Harald Rindler**

Dienstag, 23. Juni 2015, von 17:00 Uhr bis 17:45 Uhr, HS 11, 2. Stock, Oskar-Morgenstern-Platz 1, 1090 Wien

**Didaktischen Vortrag im Rahmen der Habilitation von**

**PhD Ilya Kossovskiy (Fakultät für Mathematik, Universität Wien):**

**„Harnack theorem for harmonic functions“**

(Details siehe Attachment)

**Assoz. Prof. Privatdoz. PhD Bernhard Lamel**

Montag, 22. Juni ab 15:00 – Freitag 26. Juni 2015, WPI-Seminarraum 08.135, Oskar-Morgenstern-Platz 1, 1090 Wien

**WPI-Workshop**

**Efficient numerics for NLS**

**Organized by: WPI, M. Thalhammer**

[http://www.wpi.ac.at/event\\_view.php?id\\_activity=193](http://www.wpi.ac.at/event_view.php?id_activity=193)

Dienstag, 16. Juni 2015, 9:45 Uhr bis 11:15 Uhr, Seminarraum 12, 2. Stock, Oskar-Morgenstern-Platz 1, 1090 Wien

**Complex Analysis Seminar**

**Xianghong Gong: “Real submanifolds of maximum complex tangent space at a CR singular point”**

<http://www.univie.ac.at/complexanalysis/Activities/Seminar2015.html>



Dienstag, 23. Juni 2015, von 15:15 bis 16:45 Uhr, TU Dissertantenraum, Freihaus, Turm A, 8. Stock, Wiedner Hauptstraße 8-10, 1040 Wien

**AG Diskrete Mathematik**

Emma Yu Jin: "Heaps and two exponential structures"

<http://dmg.tuwien.ac.at/nfn/agdm.html>

Donnerstag, 25. Juni 2015, von 15:15 Uhr bis 17:00 Uhr Besprechungsraum 9, 9. Stock, Oskar-Morgenstern-Platz 1, 1090 Wien

**Arbeitsgemeinschaft Ergodentheorie**

Hanna Oppelmayer(Vienna): "Entropy infinite measure preserving systems"

[http://mat.univie.ac.at/~zweimueller/AG\\_ETHY.html](http://mat.univie.ac.at/~zweimueller/AG_ETHY.html)

Donnerstag, 25. Juni 2015, von 15:30 Uhr bis 17:30, Besprechungszimmer 2. Stock, Oskar-Morgenstern-Platz 1, 1090 Wien

**AG Algebraische Geometrie**

Eleonore Faber : "The McKay correspondence and reflection groups"  
organized by H. Hauser

Donnerstag, 25. Juni 2015, von 16:00 Uhr bis 18:00 Uhr, Josephinum, SR (Zi. O2.101), Währingerstr. 25, 1090 Wien

**KGRC Research Seminar**

Peter Schuster (University of Verona, Italy, currently Humboldt returning fellow at the Munich Center for Mathematical Philosophy, Germany): "Eliminating Disjunctions by Disjunction Elimination"

[http://www.logic.univie.ac.at/2015/Talk\\_06-25\\_a.html](http://www.logic.univie.ac.at/2015/Talk_06-25_a.html)

Donnerstag, 25. Juni 2015, von 16:30 Uhr bis 18:30 Uhr, TU Seminarraum 101C, Freihaus, Grüner Bereich, 4. Stock, Wiedner Hauptstraße 8, 1040 Wien

**Vienna Seminar in Mathematical Finance and Probability**

Umut Cetin (London School of Economics, UK):

"Linear Inverse Problems and Market Microstructure"

Antoine Jacquier (imperial College London, UK):

Variations on the Heston Theme

<http://www.fam.tuwien.ac.at/events/vs-mfp/>

Freitag, 26. Juni 2015, um 10:15 Uhr, SR 7, 2. Stock, Oskar-Morgenstern-Platz 1, 1090 Wien

**Öffentliches Defensio**

Mag.rer.nat Clemens Sämann: "Geodesic completeness and global hyperbolicity for non-smooth spacetimes "

Freitag, 26. Juni 2015, um 13:00 Uhr, Besprechungszimmer 3. Stock, Oskar-Morgenstern-Platz 1, 1090 Wien

**Öffentliches Defensio**

Milena Stojkovic, MA: " Causality theory for  $C^{1,1}$  metrics "



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