

## Vorträge

Mittwoch, 16. Mai 2012, ab 16:15 Uhr, Olga Taussky-Todd Raum (C 209), UZA 4

**Mathematisches Kolloquium**

Prof. Dr. Ivar Ekeland (Université Paris-Dauphine): "A hard inverse function theorem"

### Abstract:

Classically, inverse function theorems are in finite-dimensional spaces, or in Banach spaces. It is well known that this framework is insufficient in many important cases, for instance when one deals with PDEs instead of ODEs. In such cases, one needs an inverse function theorem in  $C^\infty$ , which is a Fréchet space. Such theorems are called "hard" inverse function theorems; the first one is due to John Nash, and the method was clarified and extended by Jürgen Moser. There have been many variants since then, but all rely on the Newton approximation scheme, where the quadratic convergence overcomes the loss of derivatives. In this talk, I will review the general framework and describe a new result due to Éric Séré, Jacques Fejoz and myself, which does not use the Newton method.

(15:45 K & K im Common Room)

**Dekan Univ.-Prof. Dr. Harald Rindler, Univ.-Prof. Mag. Dr. Walter Schachermayer**

Montag, 14. Mai 2012, von 17:00 Uhr bis 18:30 Uhr, Seminarraum D 107, UZA 4

**Vortrag im Rahmen des Seminars Wahrscheinlichkeitstheorie**

Jiri Cerny; „Logarithmic Sobolev inequalities“

[http://www.mat.univie.ac.at/~finance\\_hp/seminarSS12.html](http://www.mat.univie.ac.at/~finance_hp/seminarSS12.html)

Montag, 14. Mai 2012, ab 15:15 Uhr, Seminarraum D 107, UZA 4

**Vortrag**

Harald Woracek: "Two-dimensional Hamiltonian systems with two singular endpoints"  
organized by G. Teschl

Dienstag, 15. Mai 2012, ab 15:00 Uhr, Seminarraum D 103, UZA 4

**Arbeitsgemeinschaft Biomathematik**

Krishnendu Chatterjee (IST): TBA

Dienstag, 15. Mai 2012, von 11:00 Uhr bis 12:30 Uhr, Seminarraum S1, Althanstr. 12

**Complex Analysis Seminar**

Dusty Grundmeier: "Rigidity of CR Mappings for Hyperquadrics"

organized by: A.K. Herbig

<http://www.univie.ac.at/complexanalysis/Activities/Seminar2012.html>

Dienstag, 15. Mai 2012, von 15:15 Uhr bis 16:45 Uhr, TU Institut für Diskrete Mathematik und Geometrie, Freihaus, grüner Turm (A), 8. Stock, Dissertantenr., Wiedner Hauptst. 8-10, 1040 Wien

**Arbeitsgemeinschaft Diskrete Mathematik**

Tommy Wuxing Cai: „Vertex Operator and Jack functions“

Link: <http://dmg.tuwien.ac.at/nfn/>

Dienstag, 15. Mai 2012, ab 15:00 Uhr, Seminarraum D 107, UZA 4

**Geometry and Analysis on Groups – Research Seminar**

Liviu Paunescu (Universität Wien), "Indecomposable sofic approximations."

organized by G. Arzhantseva, D. Osajda

<http://www.mat.univie.ac.at/~dosaj/GGTWien/Seminar.html>

Mittwoch, 16. Mai 2012, ab 11:15 Uhr, Alserbachstraße 23, 1090 Wien

**Nuhag Seminar**

László Toth: „Counting subgroups of  $\mathbb{Z}_n \times \mathbb{Z}_n$ “

Link: <http://www.univie.ac.at/nuhag-php/home/seminar.php>

**Mittwoch, 16. Mai 2012**, von 16:00 Uhr bis 18:30 Uhr, Josephinum, SR, Währingerstr. 25, 1090 Wien

**KGRC Research Seminar**

André Nies: "Complexity of equivalence relations"

organized by Kurt Gödel Research Center

[http://www.logic.univie.ac.at/Current\\_talk.html](http://www.logic.univie.ac.at/Current_talk.html)