

Vorträge

Mittwoch, 8. Juni 2011, von 15:00 Uhr – 15:45 Uhr, Olga Taussky-Todd Raum (C 209), UZA 4
Junior Kolloquium

Univ.-Prof. Dr. Mihai Ciucu: “Combinatorial aspects of the dimer model”

Abstract: The dimer model was phrased by physicists in the 1930's as a theoretical model for the adsorption of a liquid through the face of a crystal. Since then this model has turned out to be relevant in several other connections. One of them is the emergence of two dimensional electrostatics from the interaction of holes in dimer systems on bipartite planar lattices. This talk presents how I was led to the latter starting from a generalization of MacMahon's boxed plane partitions theorem.

(15:45 Uhr bis 16:15 Uhr: K & K im Common Room)

Mittwoch, 8. Juni 2011, ab 16:15 Uhr, Olga Taussky-Todd Raum (C 209), UZA 4
Mathematisches Kolloquium

Univ.-Prof. Dr. Mihai Ciucu: “Gaps in dimer systems and beyond”

Abstract: The prototypical example of interaction of gaps in dimer coverings was formulated by Fisher and Stephenson in 1963. Suppose we have a huge $2n \times 2n$ chessboard, and we remove a white and a black unit square from around its center. How does the number of domino tilings of the leftover board change, as the two removed unit squares move around the center of the board?

We extend the set-up to dimer coverings on planar lattices, and focus on the interaction of a finite number of gaps in the dimer covering. A number of qualitatively different behaviors arise in this way. These include two-dimensional electrostatics, for bipartite lattices with critical weighting, and a radically different interaction for critical non-bipartite lattices. Effects of the boundary of lattice graphs will also be considered, as well as connections to some classical problems in enumerative combinatorics involving plane partitions.

Throughout the discussion there is a helpful interplay between combinatorics and physical intuition. The talk is intended for a general audience.

Dekan Univ.-Prof. Dr. Harald Rindler, Univ.-Prof. Dr. Christian Krattenthaler

Dienstag, 7. Juni 2011, von 11:15 Uhr bis 12:45 Uhr, Seminarraum D 103, UZA 4

Complex Analysis Seminar

Frank Kutzschebauch: “The density property for complex manifolds – examples and applications”

Link: <http://www.univie.ac.at/complexanalysis/Activities/Seminar2011.html>

Dienstag, 7. Juni 2011, 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

Univ.-Prof. Dr. Mihai Ciucu: „A strong superposition principle for the correlation of defects in the dimer model on the square lattice“

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

Dienstag, 7. Juni 2011, ab 15:00 Uhr, Seminarraum C 209, UZA 4

Arbeitsgemeinschaft Biomathematik

Andreas Futschik: “SNP detection for next generation sequencing data”

Dienstag, 7. Juni 2011, ab 13:00 Uhr, Seminarraum D 101, UZA 4

Öffentliche Defensio

Sara Karlsson MSc. : “Consistent dynamic equity market code-books from a practical point of view“

Mittwoch, 8. Juni 2011, ab 14:00 Uhr, Erwin Schrödinger Lecture Hall, Boltzmanngasse 9, 1090 Wien

ESI Senior Research Fellow Lectures – Summer Term 2011

(Details siehe Attachment)

organized by J. Schwermer

Freitag, 10. Juni 2011, ab 12:15 Uhr, TU Institut für Diskrete Mathematik und Geometrie, Freihaus, grüner Turm (A), 5. Stock, kleiner Seminarraum 104, Wiedner Hauptstraße 8-10, 1040 Wien

Algebra Seminar

Lukas Klausner: tba

Link: <http://www.dmg.tuwien.ac.at/fg1/seminar.html>

Freitag, 10. Juni, 2011, von 8:30 Uhr bis 10:30 Uhr, Leopold Schmetterer Seminarraum des Instituts für Statistik und OR, 3. Stock Universitätsstraße 5, 1010 Wien

Berufungsvorträge Mathematics and Finance

Umut Cetin: „Dynamic Markov Bridges and Their Applications to Market Microstructure“

(Details siehe Attachment)