



Vorträge

Mittwoch, 27. Jän. 2016, ab 16:15 Uhr, Sky-Lounge (12 OG), Oskar-Morgenstern-Platz 1, 1090 Wien

**Mathematisches Kolloquium**

**Ilse Fischer (Univ. Wien): “Proof of the DASASM-conjecture”**

Abstract:

An alternating sign matrix (ASM) is a square matrix in which each entry is 0, 1 or -1, and along each row and column the nonzero elements alternate in sign and have a sum of 1. In the early 1980s, Robbins and Rumsey conjectured that the number of  $n \times n$  ASMs is  $\prod_{i=0}^{n-1} \frac{(3i+1)!}{(n+i)!}$ . Proofs of this result are not quite as simple as the formula, in fact the first proof (due to Zeilberger) is 84 pages long. Stanley and Robbins also initiated the systematical study of the enumeration of ASMs invariant under the action of subgroups of the symmetry group of the square as it turned out that many of these symmetry classes are also conjecturally enumerated by simple product formulas. The program of proving these conjectures was completed by work of Kuperberg, Okada, and Razumov and Stroganov in 2006 -- with the exception of diagonally and antidiagonally symmetric alternating sign matrices (DASASMs) of odd order. We have recently proven this last conjecture and it is the purpose of the talk to describe its proof. Important ingredients are the six-vertex model, the Yang-Baxter equation, reflection equations and Schur functions. This is joint work with Roger Behrend and Matjaz Konvalinka

15:45 Uhr – 16:15 Uhr K & K (Sky Lounge), anschließend nach dem Vortrag vinum cum pane

Harald Rindler

Montag, 25. Jän. 2016, ab 14:00 Uhr, AG Gravitation, Währingerstr. 17, Kavalierstrakt, 1 OG, Victor-Franz-Hess-HS

**Lunchseminar**

**Bobby Beig (Wien): “A generalization of the concept of mass due to Hermann and Humbert”**  
org. by P. Chrusciel,  
(Details siehe Attachment)

Dienstag, 26. Jän. 2016, ab 13:00 Uhr, AG Gravitation, Währingerstr. 17, Kavalierstrakt, 1 OG, Victor-Franz-Hess-HS

**Lunchseminar**

**Helmuth Urbantke (Wien): “Hopfions”**  
org. by P. Chrusciel,  
(Details siehe Attachment)

Dienstag, 26. Jän. 2016, von 14:15 bis 15:00 Uhr, SR 12, 2. OG., Oskar-Morgenstern-Platz 1, 1090 Wien

**Mathematical Physics Seminar**

**Isaac Alvarez Romero (NTNU Trondheim): „Direct and inverse scattering problems for multi-channel, with different decay at infinity”**  
organized by G. Teschl, O. Kostenko

<http://www.mat.univie.ac.at/~gerald/mp-sem/index.html>

Dienstag, 26. Jän. 2016, von 15:00 Uhr bis 17:00 Uhr, SR 8, 2. OG., Oskar-Morgenstern-Platz 1, 1090 Wien,

**Geometry and Analysis on Groups**

**Maxime Gheysens (EPF de Lausanne): “Amenability as an affine fixed-point property in Hilbert spaces.”**

organized by G. Arzhantseva, Ch. Cashen

<http://www.mat.univie.ac.at/~gagt/abstracts/160126.html>



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## Fakultät für Mathematik

Dienstag, 26. Jän. 2016, ab 15:00 Uhr, SR Biomathematik, 9 OG, Oskar-Morgenstern-Platz 1, 1090 Wien

### AG Biomathematik

Markus Dablander (Univ. Wien): "An introduction to the evolutionary dynamics of cancer

<http://homepage.univie.ac.at/Reinhard.Buerger/AGBio.html>

Dienstag, 26. Jän. 2016, von 15:15 Uhr bis 16:45, TU-Wien, Dissertantenraum, Freihaus, Turm A, 8. Stk. Wiedner Hauptstr. 8-10, 1040 Wien

### AG Diskrete Mathematik

Lukas Spiegelhofer (TU Wien): "Divisibility of binomial coefficients by power of two"

organized by M. Drmota

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

Mittwoch, 27. Jän. 2016 und

Freitag, 29. Jän. 2016 von 10:00 Uhr bis 12:00 Uhr, ESI, Boltzman Lecture Hall, Boltzmanngasse 9/2, 1090 Wien,

Programme on „Measured Group Theory“

### Mini Course

“On the Graham Higman group” L. Glebsky (U Autonoma de San Luis Potosi, Mexico)

org. by M. Abert (Hung. Acad. of Sciences), G. Arzhantseva (U Vienna), D. Gaboriau (ENS

Lyon), Th. Schicck (U Göttingen), A. Thom (TU Dresden)

(Details siehe Attachment)

Mittwoch, 27. Jän. 2016, von 11:30 Uhr bis 12:30 Uhr, SR 7, 2 OG, Oskar-Morgenstern-Platz 1, 1090 Wien

### NuHAG Seminar

Michael Speckbacher (Acoustics Research Inst. – Austrian Acad. Of Science): “Signal Recovery and the Large Sieve”

[http://www.univie.ac.at/nuhag-php/program/talks\\_details.php?id=3060](http://www.univie.ac.at/nuhag-php/program/talks_details.php?id=3060)

Donnerstag, 28. Jän. 2016, ab 10:00 Uhr, ESI, Boltzman Lecture Hall, Boltzmanngasse 9/2, 1090 Wien,

### ESI - Seminar

Yuri Neretin (Univ. Wien): „Groups of hierarchomorphisms of tree and related Hilbert spaces“

org. by G. Arzhantsev

(Details siehe Attachment)