

Vorträge

Mittwoch, 24. April 2013, ab 16:15 Uhr, Olga Taussky-Todd Raum (C 209), UZA 4

Mathematisches Kolloquium

Assoz. Prof. Dr. Franz Schuster (Inst. für Diskrete Mathematik und Geometrie, TU Wien):
„Affine vs. Euclidean Isoperimetric Inequalities“

Abstract: The equivalence of the classical Euclidean isoperimetric inequality and the sharp L_1 Sobolev inequality is a beautiful example of the interplay between geometric and analytic inequalities. This remarkable link has been amplified by the recent work on *affine* isoperimetric and analytic inequalities. An *affine isoperimetric inequality* is an inequality between geometric functionals which are invariant under volume preserving linear transformations. In contrast to the common misbelief that Euclidean inequalities (that is, inequalities for functionals invariant under rigid motions only) are stronger than affine inequalities, it has become apparent over the last decades that affine isoperimetric inequalities are the most powerful inequalities of (convex) geometric analysis. In this talk we discuss, in particular, one of the most important examples of an affine isoperimetric inequality: *Petty's projection inequality*. It states that among compact, convex sets of given volume, the ones whose polar projection bodies have maximal volume are precisely the ellipsoids. We will give an overview of the impact over the last decade of this inequality, its analytic version (the *affine Zhang-Sobolev inequality*), and their L_p generalizations by Lutwak-Yang-Zhang and Haberl and myself. We will also shed new light on the special role of Petty's projection inequality in affine geometric analysis by exploiting the fascinating connections between the theory of isoperimetric inequalities and the theory of valuations which were first discovered by Ludwig.

15:45 Uhr – 16:15 Uhr K & K (Common Room)

Dekan Univ.-Prof. Dr. Harald Rindler

Montag, 22. April 2013, von 15:15 Uhr bis 17:00 Uhr, Seminarraum D 107, UZA 4

Arbeitsgemeinschaft Ergodentheorie

Stefan Thurner (Med Uni Vienna): „Entropies for non-ergodic complex systems - towards a world behind Shannon.“

http://mat.univie.ac.at/~zweimueller/AG_ETHY.html

Dienstag, 23. April 2013, von 11:15 Uhr bis 12:45 Uhr, Seminarraum S1, Althanstraße 12, 1090 Wien

Complex Analysis Seminar

Herve Gaussier: „Isometries of the Kobayashi metric in convex domains“

<http://www.univie.ac.at/complexanalysis/Activities/Seminar2013.html>

Dienstag, 23. April 2013, von 15:00 Uhr bis 17:00 Uhr, Seminarraum D 101, UZA 4

Geometry and Analysis on Groups – Research Seminar

Rudolf Zeidler (Uni. Wien): „Outer automorphisms of hyperbolic groups with property (T).“

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



Fakultät für Mathematik

Dienstag, 23. April 2013, 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](#)

Olivier Bodini (Univ. Paris 13): „Efficient sampling for Motzkin trees and alternating permutations”

Mittwoch, 24. April 2013, von 15:00 Uhr bis 15:45 Uhr, Seminarraum C 209, UZA 4

[Lectures for Everybody](#)

Leonhard Summerer: „Diophantische Approximation I”

Organized by H. Hauser

Mittwoch, 24. April 2013, von 9:00 Uhr bis 10:30 Uhr, Seminarraum D 104, UZA 4

[AG Algebraische Geometrie](#)

C: Chiu: „Die Hilbertfunktion von Monomidealen“

Organized by H. Hauser

Mittwoch, 24. April 2013, ab 11:15 Uhr, Seminarraum, Alserbachstr. 23, 1090 Wien

[NuHAG-Seminar](#)

Maurice De Gosson: „A Hamiltonian Approach to Symplectic Deformations of Gabor Frames “

Link: http://www.univie.ac.at/nuhag-php/program/talks_details.php?id=2526

Mittwoch, 24. April 2013, ab 9:00 Uhr, bis Donnerstag 25. April 2013,

Atominstitut, Stadionallee 2, 1020 Wien

[Hybrid Quantum Systems: Status and Perspectives](#)

Organized by J. Schmiedmayer (WPI c/o VCQ)

Donnerstag, 25. April 2013, von 16:00 Uhr bis 18:00 Uhr, Josephinum,

SR (Zi. O2.101), Währingerstr. 25, 1090 Wien

[KGRC Research Seminar](#)

Valentin Bura (TU Wien, Austria): „Reverse Mathematics of Divisibility in Integral Domains“

http://www.logic.univie.ac.at/Current_talk.html