VORTRÄGE

Mittwoch, 28. Juni 2017 14:30 bis 15:30, Sky Lounge, 12. OG, OMP 1
Junior Kolloquium: **David Smyth (Australian National University): "Introduction to Enumerative Geometry "**
Org: M. Eichmair, Ch. Krattenthaler
(Details siehe Anhang)

We will begin by giving a historical introduction to some of the key methods and ideas of algebraic geometry. In particular, we will introduce the idea of a moduli space, and see how classical enumerative problems in algebraic geometry can be interpreted and solved within the frame-work of "intersection theory on moduli spaces". If time permits, we will sketch how ideas from string theory have led to some extraordinary conjectures regarding intersection theory on a specific, very important moduli space, namely the moduli space of stable curves. No prior knowledge of algebraic geometry will be assumed.

15:45 Uhr: Kaffeejause

Mittwoch, 28. Juni 2017 16:15 bis 17:00, Sky Lounge, 12. OG, OMP 1
Mathematisches Kolloquium: **David Smyth (Australian National Univ.): "Moduli Spaces in Algebraic Geometry"**
Org: M. Eichmair, Ch. Krattenthaler
(Details siehe Anhang)

A basic aim of complex algebraic geometry is to describe and classify the shapes that arise as the solution sets of systems of polynomials equations. I will give a historical overview of various ways in which this aim has been interpreted over the years, culminating in a discussion of the fundamental problem of constructing and compact-ifying moduli spaces of polarized complex projective algebraic varieties. Finally, I will describe some specific open questions about the moduli space of projective algebraic curves (or compact Riemann surfaces). No prior know-ledge of algebraic geometry will be assumed, and all are warmly encouraged to attend!

Vinum cum pane im Anschluss

Montag, 26. Juni 2017 14:00 bis 15:00, SR 5, 1 OG., OMP 1
Hablilitationsvortrag: **Peter Elbau (Forschungsplattform CSC, Univ. Wien): "Inverse Problems in Mathematical Imaging"**
Org: KH. Gröchenig, Ch. Krattenthaler
(Details siehe Anhang)

Abstract: Since the discovery of radiography, only a bit more than a century ago, there came up a lot of ingenious ideas on how to explore the interior of an object without harming it. And today's biological research and medicine would be unimaginable without all the amazing imaging methods which emerged from these approaches like, for example, sonography, computer tomography, or magnetic resonance imaging. Up to now, this rapid development of new imaging methods did not slow down and recently led to the exploration of coupled physics methods which make use of a combination of different physical effects to gain insights into biological samples. In this talk, I want to explain the mathematical challenges in determining the physical parameters of a medium from such a coupled physics measure-ment using the example of photoacoustic tomography. This rather new technology measures the ultrasonic signal which is produced via the photoacoustic effect by exciting the sample with a short laser pulse. From these photo-acoustic measurements, one can get, by retracing the solution of the acoustic wave equation, the initial pressure density in the object, caused by the laser excitation. This already gives a nice qualitative picture of the medium. However, the image will heavily depend on the light distribution of the laser pulse inside the sample so that we will have to solve a second inverse problem to recover the optical parameters of the medium, where the just calculated initial pressure serves as interior measurement data. Finally, I would like to discuss in a more general setting possible regularisation methods to stabilise the inversion procedure under the effect of noise in the data.

Dienstag, 27. Juni 2017 11:30 bis 13:00, SR 8, 2. OG, OMP 1
Complex Alanysis SE: **Robert Seiringer (IST Klosterneuburg): "On Bound States of Schroedinger Opertors with Matrix-Valued Potentials"**
Org: M. Reiter, B. Lamel
http://complex.univie.ac.at/events/detail-of-event/news/on-bound-states-of-schroedinger-operators-with-matrix-valued-potentials/

Dienstag, 27. Juni 2017 15:00 bis 17:00, BZ 9, 9.OG, OMP1
SE AG Biomathematik: **Sebastian Schreiber (UC Davis): "Saving soecies and combating invaders with integral operators"**
Org: J. Hermisson, R. Bürger
http://homepage.univie.ac.at/Reinhard.Buerger/AGBio.html

Dienstag, 27. Juni 2017 15:00 bis 17:00, SR 09, 2. OG, OMP 1
Research SE Geoemtry and Analysis on Groups: **Wolfgang Alexander Moens (Univ. Wien): "The restricted Burnside problem and the refined Frobenius conjecture"**
Org: G. Arzhantseva, Ch. Cashen and M. Finn-Sell
http://www.mat.univie.ac.at/~gagt/abstracts/170627.html

Dienstag, 27. Juni 2017 15:15 bis 16:45, Dissertantenraum, Freihaus, Turm A, 8. OG., Wiedner Hauptstr. 8-10, 1040 Wien
AG Diskrete Mathematik: **Zhi-Wei Sun (Nanjing Univ. China): "Some conjectural supercongruences and related topics"**
Org: Ch. Krattenthaler
http://dmg.tuwien.ac.at/nfn/agdm.html

Mittwoch, 28. Juni 2017 11:30 bis 13:00, SR 7, 2. OG., OMP 1
NuHAG SE: **Ciprian Demeter (Indiana Univ.): "Decouplings and applications"**
Org: KH. Gröchenig
http://www.univie.ac.at/nuhag-php/program/talks_details.php?id=3330

Mittwoch, 28. Juni 2017 17:00 bis 17:45, HS 16, 2. OG., OMP 1
didaktischer Vortrag im Rahmen der Habilitation: **Dalia Terhesiu (College of Engineering, Mathematics and Physical Sciences, Univ. of Exeter): "A light introduction to the Law of large numbers"**
Org: H. Bruin
(Detials siehe Anhang)

Donnerstag, 29. Juni 2017 09:00 bis 12:00, BZ 2, 2. OG., OMP 1
DACH Mini-Workshop: **"Advances in Nonsmooth Optimization"**
Org: R. Bot

Donnerstag, 29. Juni 2017 14:00 bis 16:00, KGRC, Währingerstr. 25, 2 OG, Room 101
KGRC SE: **Peter Nyikos (Univ. South Carolina, Columbia USA): "Cardinality restrictions on some kinds of laocally compact spaces"**
Org: KGRC
http://www.logic.univie.ac.at/2017/Talk_06-29_a.html

Donnerstag, 29. Juni 2017 16:00 bis 18:00, KGRC, Währingerstr. 25, 2 OG, Room 101
KGRC SE: **Witold Marciszewski (Univ. of Warsaw, Polen): "On factorization properties of function spaces"**
Org: KGRC
http://www.logic.univie.ac.at/2017/Talk_06-29_b.html

Donnerstag, 29. Juni 2017 16:30 bis 17:15, SR DC 07, Freihaus rot, 7. OG., TU Wien, Wiedner Hauptstr. 8, 1040 Wien
Vienna SE in Mathematical Finance and Probability: **Elisa Alos (Univ. Pompeu Fabra) Barcelona: "On the relationship between implied volatilities and volatility swaps: a Malliavin calculus approach"**
https://fam.tuwien.ac.at/events/vs-mfp/

Donnerstag, 29. Juni 2017 17:15 bis 18:00, SR DC 07, Freihaus rot, 7. OG., TU Wien, Wiedner Hauptstr. 8, 1040 Wien
Vienna SE in Mathematical Finance and Probability: **Ramin Okhrati (Univ. of Southampton): "Hedging of defaultable securities under partial asset observation"**
https://fam.tuwien.ac.at/events/vs-mfp/