VORTRÄGE

Mittwoch, 22. Juni 2016 von 15:00 bis 15:45 Uhr, Sky Lounge, OMP 1
Habilitationsvortrag im Rahmen d. Juniorkolloquiums: José Luis Romero (Univ. Wien):"Phase-space geometry and applications in signal analysis"

Abstract: Classical Fourier analysis studies a function by representing it as a superimposition of basic oscillatory patterns. While the Fourier transform effectively quantifies the contribution of individual frequencies to a function, it does not explain when a certain frequency makes such a contribution, and therefore it is lacking as a tool to understand phenomena whose characteristics evolve with time. Time-frequency analysis is an attempt to refine Fourier analysis by considering the time and frequency domains simultaneously (phase-space). This is challenging because time and frequency are not truly independent variables, but only approximately independent at large scales. The limit scale where joint timefrequency analysis is possible is given by the so-called uncertainty principle. I will discuss a number of problems where the uncertainty limit is approached. These include: the design of functional expansions into atoms that optimize phase-space concentration, the description of the configurations of phase-space nodes that allow for such expansions, and the description of the phase-space profile of such optimal atoms. The results to be presented have also applications in statistics, in the quantification of the performance of spectral estimators, and in signal processing, in the quantification of the amount of information carried by measurements taken by moving sensors.

15:45 Uhr Kaffeejause

Mittwoch, 22. Juni 2016 von 16:15 bis 17:00 Uhr, Sky Lounge, OMP 1
Mathematisches Kolloquium: Stefan Krasa (Univ. of Illinois):"Political Competition and the Dynamical of Parties and Candidates"

Standard models of political competition do not differentiate between parties and the candidates selected by those parties, nor between electoral competition and competition between parties for support and influence among the public. This paper introduces a framework that distinguishes between parties and their candidates, creating roles for both the importance of a party's power (size) and of party leaders' preferences for policy, which have been separately emphasized in the existing literature. For this interplay between party size and policy concerns to work, our model is dynamic. The paper provides a general existence result, conditions under which a dynamic median voter theorem is obtained, and specifies when parties choose not to contest an election. We also show that if aggregate preferences are not transitive, political competition may not lead to moderation.

im Anschluss vinum cum pane

Josef Hofbauer, Harald Rindler

Montag, 20. Juni 2016, von 9:30 Uhr – 11:00 Uhr, BZ 03.136, 3 OG., OMP 1
BV-Finanzmathematik, Didaktischer Vortrag: Jakša Cvitanić (Caltech): "Duality approach to portfolio optimization"
BV-Finanzmathematik, Wissenschaftlicher Vortrag: Jakša Cvitanić (Caltech): "Dynamic Programming Approach to Principal-Agent Problems" (Details siehe Anhang)

Montag, 20. Juni 2016, von 14:00 Uhr – 15:30 Uhr, BZ 03.136, 3 OG., OMP 1
BV-Finanzmathematik, Didaktischer Vortrag: Peter K. Friz (TU Berlin): "The Mathematics of Volatility"
BV-Finanzmathematik, Wissenschaftlicher Vortrag: Peter K. Friz (TU Berlin): "Option Pricing in the Moderate Deviations Regime" (Details siehe Anhang)

Dienstag, 21. Juni 2016, von 8:30 Uhr – 10:00 Uhr, BZ 03.136, 3 OG, OMP 1
BV-Finanzmathematik, Didaktischer Vortrag: Johannes Muhle-Karbe (Univ. of Michigan): "Optimale Liquidation großer Aktienpakete"
BV-Finanzmathematik, Wissenschaftlicher Vortrag: Johannes Muhle-Karbe (Univ. of Michigan): "Sensitivity Analysis of Optimization Problems with Small Frictions" (Details siehe Anhang)

Dienstag, 21. Juni 2016, von 10:00 Uhr bis Donnerstag, 23. Juni 2016 bis 12.00 Uhr, ESI, Boltzmann Lecture Hall,
ESI-Programme on "Nonlinear Flows"
Mini-Course 3: "Sobolev and BV functions in metric measure spaces" Luigi Ambrosio, SNS Pisa
org. by E. Feireisl (Czech Academy of Sciences, Prague), A. Jüngel (TU Vienna), A. Mielke (WIAS Berlin), G. Savaré (U Pavia), U. Stefanelli (U Vienna), (Details siehe Anhang)

Dienstag, 21. Juni 2016, von 11:00 Uhr – 12:30 Uhr, BZ 03.136, 3 OG., OMP 1
BV-Finanzmathematik, Didaktischer Vortrag: Kathrin Glau (TU München): "Option Pricing with Fourier Transform Methods"
BV-Finanzmathematik, Wissenschaftlicher Vortrag: Kathrin Glau (TU München): "Magic Points in Finance: Empirical Interpolation and Applications" (Details siehe Anhang)

Dienstag, 21. Juni 2016, von 15:00 Uhr – 16:30 Uhr, BZ 03.136, 3 OG., OMP 1
BV-Finanzmathematik, Didaktischer Vortrag: Jan Obloj (Univ. Oxford): "Introduction to option pricing in a complete market"
BV-Finanzmathematik, Wissenschaftlicher Vortrag: Jan Obloj (Univ. Oxford): "Robust Pricing and Hedging and its probabilistic counterparts" (Details siehe Anhang)

Dienstag, 21. Juni 2016, 15:00 Uhr bis 16:00 Uhr, BZ 9, 9 OG., OMP 1
AG Biomathematik : Sara Henze (Univ. Wien): "How do cells move – The filament based Lamellipodium model"
org. by R. Bürger, J. Hermisson
http://homepage.univie.ac.at/Reinhard.Buerger/AGBio.html

Dienstag, 21. Juni 2016, von 15:00 bis 17:00 Uhr, SR 9, 2. OG., OMP 1
Geometry and Analysis on Groups, Research SE:Andrei Minchenko (Univ. Wien):"Differential Algebraic Groups and Their Applications."
org. by G. Arzhantseva, Ch. Cashen
http://www.mat.univie.ac.at/~gagt/abstracts/160621.html

Dienstag, 21. Juni 2016, von 15:15 bis 16:45 Uhr, TU Dissertantenraum, Freihaus, Turm A, 8. Stock, Wiedner Hauptstraße 8-10, 1040 Wien
AG Diskrete Mathematik Seminar: Manjil Saikia: "Enumeration of Domino Tilings of an Aztec Rectangle with boundary defects"
org. by Ch. Krattenthaler
http://dmg.tuwien.ac.at/nfn/agdm.html

Mittwoch, 22. Juni 2016, von 9:00 Uhr – 10:30 Uhr, BZ 03.136, 3 OG., OMP 1
BV-Finanzmathematik, Didaktischer Vortrag: Birgit Rudolff (WU Wien):"On the dual representation of risk measures"
BV-Finanzmathematik, Wissenschaftlicher Vortrag: Birgit Rudolff (WU Wien): "Multivariate risks"
(Details siehe Anhang)

Mittwoch, 22. Juni 2016, von 12:30 Uhr – 14:00 Uhr, BZ 03.136, 3 OG., OMP 1
BV-Finanzmathematik, Didaktischer Vortrag: Francesca Biagini (LMU München): "Complete market models in discrete times"
BV-Finanzmathematik, Wissenschaftlicher Vortrag: Francesca Biagini (LMU München): "Mathematical models for financial asset bubbles" (Details siehe Anhang)

Donnerstag, 23. Juni 2016, von 9:30 Uhr – 11:00 Uhr, BZ 03.136, 3 OG., OMP 1
BV-Finanzmathematik, Didaktischer Vortrag: Stefan Gerhold (TU Wien): "Local volatility and the Dupire formula"
BV-Finanzmathematik, Wissenschaftlicher Vortrag: Stefan Gerhold (TU Wien): "Asymptotic approximations of implied and local volatility" (Details siehe Anhang)

Donnerstag, 23. Juni 2016, von 14:00 Uhr – 15:30 Uhr, BZ 03.136, 3 OG., OMP 1
BV-Finanzmathematik, Didaktischer Vortrag: Marcel Nutz (Univ. of Columbia): "The Law of Large Numbers"
BV-Finanzmathematik, Wissenschaftlicher Vortrag: Marcel Nutz (Univ. of Columbia): "Perspectives in Mathematical Finance" (Details siehe Anhang)

Donnerstag, 23. Juni 2016, ab 14:00 Uhr SR A (218), Währingerstr. 17, 2. OG.,
AG Gravitation Literaturseminar: Helmut Friedrich (MPI Golm):" Smooth conformal Einstein-lambda-dust flows across time-like infinity"
org. by P. Chrusciel (Details siehe Anhang)

Freitag, 24. Juni 2016, von 9:30 Uhr – 11:00 Uhr, BZ 03.136, 3 OG., OMP 1
BV-Finanzmathematik, Didaktischer Vortrag: Mathias Beiglböck (TU Wien): "Martingales, Inequalities, and Model-Free Finance"
BV-Finanzmathematik, Wissenschaftlicher Vortrag: Mathias Beiglböck (TU Wien): "The Geometry of Model Risk" (Details siehe Anhang)