

## Vorträge

Mittwoch, 17. Oktober 2012, ab 16:15 Uhr, Olga Taussky-Todd Raum (C 209), UZA 4

### Mathematisches Kolloquium

#### Einladung zu einem Vortrag im Rahmen der Habilitation von

Dr. Oleksiy Kostenko: „The HELP inequality and indefinite spectral problems”

#### Abstract:

*We study two problems. The first one is the similarity problem for indefinite Sturm--Liouville spectral problems. The second object is the so-called HELP inequality, a version of the classical Hardy-Littlewood inequality proposed by W.N. Everitt in 1971. Both problems are well understood when the corresponding Sturm-Liouville differential expression is regular. Our main objective is to give criteria for both the validity of the HELP inequality and the similarity to a self adjoint operator in the singular case. Namely, we establish new criteria formulated in terms of the behavior of the corresponding Weyl-Titchmarsh  $m$ -functions at  $0$  and at  $\infty$ . As a byproduct of this result we show that both problems are closely connected. Next we characterize the behavior of  $m$ -functions in terms of coefficients*

*and then these results enable us to reformulate the obtained criteria in terms of coefficients. Finally, we apply these results for the study of the two-way diffusion equation, also known as the time-independent Fokker-Plank equation.*

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

Univ.-Prof. Mag. Dr. Karlheinz Gröchenig, Dekan Univ.-Prof. Dr. Harald Rindler

Montag, 15. Oktober 2012, ab 9:45 Uhr bis Freitag, 19. Oktober 2012, ab 10:00 Uhr, Erwin Schrödinger Lecture Hall, Boltzmanngasse 9, 1090 Wien

### Modern Methods of Time-Frequency Analysis II

#### Workshop Phase space methods for pseudodifferential operators

Montag, 15. Oktober 2012, von 15:45 Uhr - 16:30 Uhr

Sundaram Thangavelu: Riesz transforms and multipliers for the Grushin operator

(Vortrag ist abgesagt!)

Link: [http://www.univie.ac.at/nuhag-php/program/talks\\_details.php?id=2337](http://www.univie.ac.at/nuhag-php/program/talks_details.php?id=2337)

Montag, 15. Oktober 2012, von 15:05 Uhr bis 16:50 Uhr, Seminarraum 2A310, UZA 2  
**Arbeitsgemeinschaft Ergodentheorie**  
*Thermodynamics for Lebesgue dissipative interval maps.*  
[http://mat.univie.ac.at/~zweimueller/AG\\_ETHY.html](http://mat.univie.ac.at/~zweimueller/AG_ETHY.html)

Montag, 15. Oktober 2012, ab 14:15 Uhr, Seminarraum D 104, UZA 4  
**Öffentliche Defensio**  
Boyu Zhang: „Evolutionary games and equilibrium selection”

Montag, 15. Oktober 2012, von 17:00 Uhr bis 18:30 Uhr, Seminarraum D 101  
**Vortrag im Rahmen des Seminars Wahrscheinlichkeitstheorie**  
Christoph Temmel: „Shearer's measure and stochastic domination of Bernoulli product fields”  
Link: [http://www.mat.univie.ac.at/~finance\\_hp/seminarWS12\\_prob.html](http://www.mat.univie.ac.at/~finance_hp/seminarWS12_prob.html)

Dienstag, 16. Oktober, 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**  
Per W. Alexandersson (Stockholm University): “Stretched skew Schur polynomials are recurrent”

Dienstag, 16. Oktober 2012, ab 14:00, WPI Seminarraum C 714  
**WPI Talk**  
Emeric Bouin (ENS Lyon) : “Kinetic traveling waves: swimming bacteria and cane toads”  
[http://www.wpi.ac.at/talks\\_view.php](http://www.wpi.ac.at/talks_view.php)

Mittwoch, 17. Oktober 2012, von 14:20 Uhr bis 16:00 Uhr, Seminarraum C 207, UZA 4  
**Geometry and Analysis on Groups – Research Seminar**  
Alexandra Pettet (University of British Columbia): “Relative twisting in Outer space.”  
organized by G. Arzhantseva, D. Osajda  
<http://www.mat.univie.ac.at/~dosaj/GGTWien/Seminar.html>

Donnerstag, 18. Oktober 2012, von 16:00 Uhr bis 18:00 Uhr, Josephinum, SR (Zi. O2.101), Währingerstr. 25, 1090 Wien  
**KGRC Research Seminar**  
Laura Fontanella (KGRC): “Large Properties at Small Cardinals”  
[http://www.logic.univie.ac.at/Current\\_talk.html](http://www.logic.univie.ac.at/Current_talk.html)

Donnerstag, 18. Oktober 2012, von 17:00 Uhr bis 18:30 Uhr, Seminarraum D 101  
**Vortrag im Rahmen des Seminars Finanzmathematik**  
Nicolas Perkowski: “The existence of dominating local martingale measures”  
Link: [http://www.mat.univie.ac.at/~finance\\_hp/seminarWS12.html](http://www.mat.univie.ac.at/~finance_hp/seminarWS12.html)

Freitag, 19. Oktober 2012, 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**  
• 12:15 Valerie Berthé: Fully subtractive algorithm and discrete geometry  
• 13:00 Timo Jolivet: Rauzy fractals with countable Fundamental group  
Link: <http://www.dmg.tuwien.ac.at/fg1/seminar.html>