

VORTRÄGE

Mittwoch, 08. März 2017, 14:30 Uhr bis 15:30 Uhr, Sky Lounge, OMP 1

Junior Kolloquium: Arnold Neumaier (Univ. Wien), "Reproducing Kernel Hilbert Spaces"

Org: Ch. Krattenthaler

This lecture gives an introduction to reproducing kernel Hilbert spaces and their basic properties. To demonstrate their power it is shown how to derive simple error estimates for numerical integration. Examples of reproducing kernels were first discussed by Zaremba 1907 in the context of boundary value problems and by Mercer 1909 in the context of integral equations. The theory was systematically developed by Aronszajn 1950, Krein 1963, and others. Of particular importance is the use of reproducing kernels in complex analysis and group theory, where they are the basis of many important theorems. Reproducing kernel Hilbert spaces and the associated coherent states also have applications in many other fields of mathematics, statistics, physics, and engineering. Coherent spaces (the subject of the subsequent Mathematical Kolloquium lecture) abstract the essential geometric properties needed to define a reproducing kernel Hilbert space.

15:45 Uhr Kaffeejause

Mittwoch, 08. März 2017, 16:15 Uhr bis 17:00 Uhr, Sky Lounge, OMP 1

Mathematisches Kolloquium: Arnold Neumaier (Univ. Wien),: "Coherent Spaces -- a Nonlinear Generalization of Hilbert Spaces"

Org: Ch. Krattenthaler

The notion of a coherent space is a nonlinear version of the notion of a complex Euclidean space: The vector space axioms are dropped while the notion of inner product is kept. Coherent spaces provide a setting for the study of geometry in a different direction than traditional metric, topological, and differential geometry. Just as it pays to study the properties of manifolds independently of their embedding into a Euclidean space, so it appears fruitful to study the properties of coherent spaces independent of their embedding into a Hilbert space. Coherent spaces have close relations to reproducing kernel Hilbert spaces, Fock spaces, and unitary group representations, and many other fields of mathematics, statistics, and physics. The lecture covers basic notions about coherent spaces and their symmetries. Some of the relations to the fields mentioned will be outlined. (For a complete list of application fields see <http://www.mat.univie.ac.at/~neum/cohLectures.pdf>. If you contact me sufficiently in advance, you might affect the fields selected.)

Anschließend vinum cum pane

Dienstag, 07. März 2017, 9.00 Uhr bis 10. März 2017 16:00 Uhr,, WPI Seminarraum 08.135

Working Group WPI: "Efficient numerical methods for quantum systems"

Org: M. Thalhammer (U. Innsbruck), N. J. Mauser (WPI c/o U. Wien & CNRS)

http://www.wpi.ac.at/event_view.php?id_activity=235

Dienstag, 07. März 2017, 15:00 Uhr bis 17:00 Uhr, SR 09, 2. OG., OMP 1

Geometry and Analysis on Groups Research SE: Michael Wibmer (Univ. of Pennsylvania)
"Difference algebraic groups"

Org: G. Arzhantseva, Ch. Cashen

<http://www.mat.univie.ac.at/~gagt/abstracts/170307.html>

Dienstag, 07. März 2017, 15:15 Uhr bis 16:45 Uhr, Dissertantenraum, Freihaus, Turm A, 8. OG., Wiedner Hauptstr. 8-10, 1040 Wien

AG Diskrete Mathematik: Cesar Ceballos (Univ. Wien),: "The configuration space of a robotic arm in a tunnel"

Org: Ch. Krattenthaler

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

Dienstag, 07. März 2017, 18:00 Uhr bis 19:30 Uhr, Aula am Campus, Spitalgasse 2, Hof 1.11, 1090 Wien

"uniMind|Lecture "Ressourcenoptimierung durch Mathematik"

Org: Universität Wien Postgraduate Center

(Details siehe Anhang)

Donnerstag, 09. März 2017, 13:00Uhr bis 11. März 2017 13:25 Uhr, Kleiner Festsaal, Universität Wien, Universitätsring 1, 1010 Wien

"Vienna-Copenhagen Conference on Financial Econometrics"

Org: DOSR, WPI, UCPH, N. Hautsch (WiWi, U. Wien)

http://vieco2017.univie.ac.at/fileadmin/user_upload/k_vieco2017/Program_Final.pdf

Donnerstag, 09. März 2017, 14:00 Uhr bis 15:00 Uhr, AG Gravitation, Währingerstr. 17, Raum 218, 2. OG

Literstur SE Tim Paetz (Univ. Wien): "On the smoothness of the cylinder at spatial infinity in vacuum spacetimes"

Org: P. T. Chrusciel

(Details siehe Anhang)

Donnerstag, 09. März 2017, 15:15 Uhr bis 17:00 Uhr, SR Biomathematik 9. OG., OMP 1

AG Ergodentheorie: Bernd Kumhera (U Vienna): "Measure Theoretic Chaos and Sensitivity II"

Org: H. Bruin, R. Zweimüller

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

Donnerstag, 09. März 2017, 16:00 Uhr bis 18:00 Uhr, KGRC, Währingerstr. 25, 2 OG, Room 101

KGRC SE: Yizheng Zhu (Univ. Münster), "Projective sets and inner models"

Org: KGRC

http://www.logic.univie.ac.at/2017/Talk_03-09_a.html

Donnerstag, 09. März 2017, 16:30 Uhr bis 18:00Uhr, SR DC 07, Freihaus rot, 7. OG., TU Wien, Wiedner Hauptstr. 8, 1040 Wien

Vienna SE in Mathematical Finance and Probability: Johannes Heiny (Univ. of Copenhagen & Aarhus Univ.): "Limit theorems for the largest eigenvalues of the sample covariance matrix of a heavy-tailed time series"

<https://fam.tuwien.ac.at/events/vs-mfp/>