

## VORTRÄGE

**Mittwoch, 06. Juni 2018 14:45 bis 15:45**, Sky Lounge, 12. OG, OMP 1

**Junior-Kolloquium: Michael Schlosser (Universität Wien): „The Rogers-Ramanujan identities“**

Org: Fakultät für Mathematik, Dekan Christian Krattenthaler

[https://mathematik.univie.ac.at/fileadmin/user\\_upload/f\\_mathematik/Vortraege/2017\\_18/20180606\\_MichaelSchlosser\\_JK-1.pdf](https://mathematik.univie.ac.at/fileadmin/user_upload/f_mathematik/Vortraege/2017_18/20180606_MichaelSchlosser_JK-1.pdf)

**Abstract:** *The first and second Rogers-Ramanujan (RR) identities have a prominent history. They were originally discovered and proved in 1894 by Leonard J. Rogers, and then independently rediscovered by the legendary self-taught Indian mathematician Srinivasa Ramanujan some time before 1913. They were also independently discovered and proved in 1917 by Issai Schur. About the RR identities Hardy remarked „It would be difficult to find more beautiful formulae than the „Rogers-Ramanujan“ identities, ...“ Apart from their intrinsic beauty, the RR identities have served as a stimulus for tremendous research around the world. The RR and related identities have found interpretations in various areas including combinatorics, number theory, probability theory, statistical mechanics, representations of Lie algebras, vertex algebras, and conformal field theory. This talk is oriented towards a general mathematical audience and will be accessible for students. The RR identities and related identities will be surveyed, their partition-theoretic interpretations explained. Further, Watson's proof (published in 1929) of the RR identities will be carefully reviewed. This proof, commonly viewed as the most elementary proof of the RR identities, is analytic and employs the machinery of basic hypergeometric series.*

**15:45 Kaffeejause**

**Mittwoch, 06. Juni 2018 16:15 bis 17:15**, Sky Lounge, 12. OG, OMP 1

**Mathematisches Kolloquium: Michael Schlosser (Universität Wien): "Bilateral identities of the Rogers-Ramanujan type"**

Org: Fakultät für Mathematik, Dekan Christian Krattenthaler

[https://mathematik.univie.ac.at/fileadmin/user\\_upload/f\\_mathematik/Vortraege/2017\\_18/20180606\\_MichaelSchlosser\\_JK-1.pdf](https://mathematik.univie.ac.at/fileadmin/user_upload/f_mathematik/Vortraege/2017_18/20180606_MichaelSchlosser_JK-1.pdf)

**Abstract:** *The Rogers-Ramanujan (RR) identities are deep identities which have found interpretations in various areas including combinatorics, number theory, probability theory, statistical mechanics, representations of Lie algebras, vertex algebras, and conformal field theory. In this talk, a number of bilateral identities of the RR type will be presented. These identities are derived by analytic means using identities for bilateral basic hypergeometric series. Our results include bilateral extensions of the RR and of the Göllnitz-Gordon identities, and of related identities by Ramanujan, Jackson, and Slater. Corresponding results for multiserries are given as well, including multilateral extensions of the Andrews-Gordon identities, of Bressoud's even modulus identities, and others. The here revealed closed form bilateral and multilateral summations appear to be the very first of their kind. Given that the classical RR identities have well-established connections to various areas in mathematics and in physics, it is natural to expect that the new bilateral and multilateral identities can be similarly connected to those areas. This is supported by concrete combinatorial interpretations for a collection of four bilateral companions to the classical RR identities.*

**Anschließend vinum cum pane**

**Montag, 04. Juni 2018 09:30 bis Freitag, 08. Juni 2018 13:00**, Am Campus 1, Klosterneuburg

**Summer school: "Probability and Mathematical Physics"**

Org: IST Austria

<http://ist.ac.at/pmp2018>

**Dienstag, 05. Juni 2018 13:45 bis 14:45**, Fakultät für Physik, Erwin Schrödinger-Hörsaal, Boltzmanng. 5, 5. St., 1090 Wien

**SE Mathematische Physik: Peter Presnajder (Comenius Univ. Bratislava): "Quantum systems in relativistic fuzzy spaces"**

Org: S. Fredenhagen, D. Grumiller, H. Steinacker

[https://mathematik.univie.ac.at/fileadmin/user\\_upload/f\\_mathematik/Vortraege/2017\\_18/Seminareinladung\\_Mathematik\\_Presnajder\\_5Juni2018.pdf](https://mathematik.univie.ac.at/fileadmin/user_upload/f_mathematik/Vortraege/2017_18/Seminareinladung_Mathematik_Presnajder_5Juni2018.pdf)

**Dienstag, 05. Juni 2018 15:00 bis 17:00**, BZ 9, 9.OG, OMP1

**AG Biomathematik: Hannah Götsch (Uni. Wien): "A two-locus two-deme model"**

Org: J. Hermisson, R. Bürger

<http://homepage.univie.ac.at/Reinhard.Buerger/AGBio.html>

**Dienstag, 05. Juni 2018 15:00 bis 17:00**, SR 10, 2. OG., OMP 1

**Geometry and Analysis on Groups Research SE: Jing Tao (Univ. of Oklahoma): "Minicourse on quasimorphisms I&II"**

Org: G. Arzhantseva, Ch. Cashen

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

**Dienstag, 05. Juni 2018 15:00 bis 15:45**, TU Wien, Wiedner Hauptstr. 8, FH 8 Nöbauer HS 2. OG  
**PDE Afternoon: Esther S. Daus (TU Wien): "Reaction-cross diffusion systems and their derivation from microscopic models"**

Org: SFB, DK

<https://www.univie.ac.at/sfb65/public/events/details/?type=1&id=120>

**Dienstag, 05. Juni 2018 15:15 bis 16:45**, Dissertantenraum, Freihaus, Turm A, 8. OG., Wiedner Hauptstr. 8-10, 1040 Wien

**AG Diskrete Mathematik: Gaurav Bhatnagar (Univ. Wien): "The determinant of an elliptic Sylvesteresque matrix"**

Org: Ch. Krattenthaler

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

**Dienstag, 05. Juni 2018 16:00 bis 16:30**, TU Wien, Wiedner Hauptstr. 8, FH 8 Nöbauer HS, 2. OG

**PDE Afternoon: Katharina Brazda (Univ. Wien): "Variational models for biological membranes"**

Org: SFB, DK

<https://www.univie.ac.at/sfb65/public/events/details/?type=1&id=121>

**Dienstag, 05. Juni 2018 16:15 bis 17:15**, Fakultät für Physik, Erwin Schrödinger-Hörsaal, Boltzmanng. 5, 5. St., 1090 Wien

**Teilchenphysik SE: Daniel Samitz (Univ. Wien): "On the cut-off dependence of the quark mass parameter in angular-ordered parton showers"**

Org: A. Hoang, H. Neufeld

[https://mathematik.univie.ac.at/fileadmin/user\\_upload/f\\_mathematik/Vortraege/2017\\_18/SeminareinladungTeilchen\\_Samitz\\_5Juni2018.pdf](https://mathematik.univie.ac.at/fileadmin/user_upload/f_mathematik/Vortraege/2017_18/SeminareinladungTeilchen_Samitz_5Juni2018.pdf)

**Dienstag, 05. Juni 2018 16:30 bis 17:00**, TU Wien, Wiedner Hauptstr. 8, FH 8 Nöbauer HS, 2. OG

**PDE Afternoon: Noema Nicolussi (Univ. Wien): "On the Hamiltonian-Krein instability index"**

Org: SFB, DK

<https://www.univie.ac.at/sfb65/public/events/details/?type=1&id=122>

**Mittwoch, 06. Juni 2018 13:45 bis 14:30**, HS 10, 2. OG, OMP 1

**PhD Colloquium: Daniel Scherl (Univ. Wien): "What the heck is TQFT"**

Org: Vienna Doctoral School of Mathematics

[https://mathematik.univie.ac.at/fileadmin/user\\_upload/f\\_mathematik/Vortraege/2017\\_18/poster-2018-06-06.pdf](https://mathematik.univie.ac.at/fileadmin/user_upload/f_mathematik/Vortraege/2017_18/poster-2018-06-06.pdf)

**Mittwoch, 06. Juni 2018 14:15 bis 16:00**, BZ 2, 2. OG., OMP 1

**Andras Juhasz (Uni Oxford): "Defining and classifying TQFTs via surgery"**

Org: N. Carqueville

**Donnerstag, 07. Juni 2018 14:00 bis 15:00**, AG Gravitation, Währingerstr. 17, Raum 218, 2. OG

**Literatur SE: Jan Sbierski (Univ. Oxford): "On the unique evolution of solutions to wave equations"**

Org: P. Chrusciel, D. Fajman

[https://mathematik.univie.ac.at/fileadmin/user\\_upload/f\\_mathematik/Vortraege/2017\\_18/SeminareinladungGRAVI\\_Sbierski\\_7Juni2018.pdf](https://mathematik.univie.ac.at/fileadmin/user_upload/f_mathematik/Vortraege/2017_18/SeminareinladungGRAVI_Sbierski_7Juni2018.pdf)

**Donnerstag, 07. Juni 2018 14:15 bis 16:00**, BZ 2, 2. OG., OMP 1

**Andres Juhasz (Uni Oxford): "The classification of (2+1)-dimensional TQFTs"**

Org: N. Carqueville

**Donnerstag, 07. Juni 2018 16:00 bis 18:00**, KGRC, lecture room, Währinger Str. 25, 1090 Wien

**KGRC SE: Andrea Medini (KGRC): "Homogeneous spaces and Wadge theory"**

Org: KGRC

[http://www.logic.univie.ac.at/2018/Talk\\_06-07\\_a.html](http://www.logic.univie.ac.at/2018/Talk_06-07_a.html)

**Donnerstag, 07. Juni 2018 16:30 bis 18:00**, Seminarraum DC Roter Bereich, 7. OG, TU Wien, Freihaus, Wiedner Hauptstraße. 8, 1040 Wien

**Vienna SE in Mathematical Finance and Probability: Lorenzo Mercuri (Univ. of Milan, IT): "On properties of the Mixed Tempered Stable distribution and its Multivariate Version"**

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

**Freitag, 08. Juni 2018 14:00 bis 15:00**, SR 7, 2. OG., OMP 1

**Sudarshan Gurjar (IIT Bombay): "Schematic Harder-Narasimhan stratification"**

Org: L. Katzarkov