



## Vorträge

**Montag, 30. Juni 2014, von 14:00 Uhr bis 15:00 Uhr, Hörsaal 13, 2. Stock,  
Oskar-Morgenstern-Platz 1, 1090 Wien**

**Außerordentliches Mathematisches Kolloquium –  
didaktischer Vortrag im Rahmen der Habilitation**

**Dr. Harald Grobner (Fakultät für Mathematik, Universität Wien):**

**„From triangles to modular forms – from Fibonacci's "congrua" to Fermat's Last  
Theorem“**

*Abstract: In his book {it Liber Quadratorum} (Book of Squares) from 1225, Fibonacci studied 3-term arithmetic progressions of integral squares, i.e. triples of the form  $(x^2-n, x^2, x^2+n)$  with both  $x^2 \mp n$  being squares. More generally, allowing triples of squares of rational numbers, the question of which triples of that form (Fibonacci's "congrua") exist, is equivalent to asking which integers  $n$  can be written as the area of a right triangle with rational sides. As we will see, this at first sight maybe simple looking question, leads us directly to consider elliptic curves and their rational points. This, in turn, is intimately linked to Fermat's Last Theorem and its proof by Wiles and Taylor.*

*The passage from elliptic curves to Fermat's Last Theorem is provided by cuspidal modular forms. These are certain functions on the Siegel upper half-space, which might be viewed as the most classical instance of what one would nowadays call an automorphic form. If time permits, we will shortly sketch the eminent role of automorphic forms in the Langlands Program, a program, which, from some perspective, generalizes some ideas behind the proof of FLT.*

*Der Vortrag [Dauer 60 Minuten] zu einem Thema eigener Wahl richtet sich an Studierende, die das 3.te Studienjahr abgeschlossen haben. Dies dient auch als Grundlage der zu erstellenden Gutachten bzgl. der didaktischen Fähigkeiten des Kandidaten.*

**Univ.-Prof. Dr. Joachim Schwermer**



Montag, 30. Juni 2014 ab 10:30 Uhr, Erwin Schrödinger Lecture Hall, Boltzmannngasse 9, 1090 Wien

**ESI Seminar**

Dr. Paul Wedrich (Univ. Cambridge): „Categorified colored HOMFLY invariants of rational tangles“

organized by N. Carqueville

Dienstag, 1. Juli 2014, ab 15:30 Uhr, Seminarraum 8, 2. Stock, Oskar-Morgenstern-Platz 1, 1090 Wien

**Vortrag**

Julio Backhoff: tba

**Organized by M. Beiglböck, W. Schachermayer**

Dienstag, 1. Juli 2014, von 15:15 Uhr bis 17:00 Uhr, Seminarraum 8, 2. Stock, Oskar-Morgenstern-Platz 1, 1090 Wien

**Arbeitsgemeinschaft Ergodentheorie**

Liejune Shiao (Univ. Houston): „Adaptations in spiking correlations in an exponential integrate-and-fire model.“

Dienstag, 1. Juli 2014, von 11:15 Uhr bis 12:45 Uhr, Seminarraum 12, 2. Stock, Oskar-Morgenstern-Platz 1, 1090 Wien

**Complex Analysis Seminar**

Franz Berger : “Toeplitz  $C^*$ -algebras for pseudoconvex Reinhardt domains”

Donnerstag, 3. Juli 2014, von 16:30 Uhr bis 18:00 Uhr, Seminarraum 101 C, 4. Stock, TU Wien, Wiedner Hauptstraße 8, 1040 Wien

**Vienna Seminar in Mathematical Finance and Probability**

Larry Goldstein (Univ. of Southern California, Los Angeles, USA):

“Applications of Stein Couplings for Concentration of Measure”

Link: <http://www.fam.tuwien.ac.at/vs-mfp/>

Donnerstag, 3. Juli 2014, ab 10:00 Uhr, Besprechungsraum, 9. Stock, Oskar-Morgenstern-Platz 1, 1090 Wien

**Öffentliche Defensio**

Agnes Rettelbach: „Models of adaptive speciation with gene flow“