

Technikerstraße 13/7  
A-6020 Innsbruck  
Telefon: +43 512 507 6071 oder 6097

E-Mail: [mathematik@uibk.ac.at](mailto:mathematik@uibk.ac.at)  
<http://www.uibk.ac.at/mathematik/>  
Fax: +43 512 507 2920

## MATHEMATIKKOLLOQUIUM

Das Institut für Mathematik lädt zu folgendem Vortrag ein:

**Josep Lluís Solé**

Autonomous University of Barcelona

### **Lévy processes: moments, cumulants and polynomials**

In the colloquium we will do a walk for the world of Lévy processes, that basically are stochastic processes with stationary and independent increments. We will consider specially the properties of its moments and cumulants, if they exist. They are related with the moments of the Lévy measure associated to the process, that give us information about the jumps sizes. We will introduce also three different families of polynomials, the time-space harmonic, the Kaylath-Segall and the Teugels polynomials, all associated with the Lévy process through the cumulants. This part of the talk is based in some papers written with Frederic Utzet. Finally, I would like to say some words about the concept of cumulants in the free probability scenario.

Zeit: **Dienstag, den 10. Mai 2011 um 17.15 Uhr**

Ort: **Victor-Franz-Hess Haus, Technikerstraße 25, HS F**

**Gäste sind herzlich willkommen!**

*Christel & Stefan Geiß*