Gemeinsame Veranstaltung von
Humboldt-Universität zu Berlin, Institut für Physik
(Theorie der Elementarteilchen / Computerorientierte Theoretische Physik)
DESY, Zeuthen

SEMINAR
Feldtheorie auf dem Gitter und Phänomenologie der Elementarteilchen

Am Montag, dem **30. Juni, um 15:30 Uhr s.t.** spricht

Prof. **F. F. Assaad**

Universität Würzburg

zum Thema

The Hubbard model from zero to infinite dimensions and back

Abstract

The low temperature properties of transition metal oxides and rare earth compounds are dominated by electronic correlations. Those correlation effects are at the origin of Mott insulators, quantum magnetism and high-temperature superconductivity. The fundamental model Hamiltonian which can capture the above physics is the Hubbard model, the numerical solution of which poses a formidable challenge. In this talk I will review novel as well as established stochastic methods all aimed at understanding the phase diagram of the Hubbard model in various dimensions and on various lattice topologies.

Ort: Humboldt-Universität zu Berlin, Institut für Physik
Newtonstraße 15, 12489 Berlin-Adlershof, **Raum 1'202**
(Lageplan: `http://linde.physik.hu-berlin.de/images/lageplan_neu.gif`)

Web: `http://www-zeuthen.desy.de/~stschaef/seminar/seminar.html`