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 Dienstag, dem **11. Dezember, um 15:00 Uhr s.t.** spricht

Dr. **Stefan Sint**

Trinity College, Dublin

zum Thema

The chirally rotated Schroedinger functional

Abstract

The Schroedinger functional (SF) has become an important tool to tackle non-perturbative renormalisation problems in lattice QCD. I first review the properties of SF schemes and how they can be implemented both for Wilson and Ginsparg-Wilson type quarks. I then argue that the elimination of bulk O(a) effects with Wilson quarks will be important in order to improve the control of the continuum limit. This can be achieved by imposing chirally rotated SF boundary conditions on a flavour doublet of quarks. I'll discuss renormalisation and O(a) improvement of both the Wilson and Ginsparg-Wilson regularisations and comment on the generalisation to odd flavour numbers.

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`