

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 **26 September**, um **15:30 Uhr s.t.** spricht

Prof. **Keh-Fei Liu**

University of Kentucky – Lexington

zum Thema

**Gauge Field Tensor and Gauge Action**  
**from the Overlap Operator**

**Abstract**

I will discuss how the gauge field tensor and gauge action can be derived as the classic continuum limit of the Overlap Dirac operator and how to carry out HMC simulation of such an action. Also presented are some results on the topological structure of vacuum and the  $O(m^2 a^2)$  errors of the Overlap fermion. If time permits, I will discuss issues on challenges in chiral extrapolation, heavy-light systems, disconnected insertions and the glue content in hadrons.

**Ort:** DESY, Zeuthen  
Platanenallee 6, 15738 Zeuthen, Hörsaal 3

**Fahrverbindungen:** S-Bahn-Station Zeuthen

**Web:** <http://www-zeuthen.desy.de/~shindler/seminar/seminar.html>