

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 **14 November**, um **15:30 Uhr s.t.** spricht

Prof. **Anna Hasenfratz**

University of Colorado at Boulder  
Max Planck Institute – München

zum Thema

**The 2-flavor chiral condensate from mixed  
action simulations**

**Abstract**

Growing evidence indicates that in the continuum limit the rooted staggered action is in the correct QCD universality class, the non-local terms arising from taste breaking can be viewed as lattice artifacts. Here we probe the properties of the staggered configurations by an overlap valence Dirac operator. By comparing the distribution of the overlap eigenmodes to continuum QCD predictions one can investigate if/when the lattice artifacts are small as a function of the staggered quark mass. The results indicate that the staggered configurations are consistent with 2-flavor continuum QCD up to small lattice artifacts, and predict a consistent value for the infinite volume chiral condensate.

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

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