



## SFB-Seminar

### ZEIT:

25.11.2008, 16:00 Uhr - 19:00 Uhr

### ORT:

Konrad-Zuse-Zentrum für Informationstechnik Berlin  
Takustrasse 7  
14195 Berlin-Dahlem

### PROGRAMM:

16:00 - 17:00 **Martijn Wijnholt (AEI)**

#### **Hitchin's equations and phenomenology**

17:00 - 17:30 Kaffeepause

17:30 - 18:30 **Dr. David Ploog (Hannover)**

#### **McKay correspondence for Kleinian and Fuchsian singularities via spherical twists**

We consider Kleinian and Fuchsian singularities, which are related to classical McKay correspondence (Kleinian case) and to mirror symmetry in the guise of Arnold's strange duality (special Fuchsian singularities). They come with lattices obtained by resolution and compactification. We show how these lattices naturally arise as K-groups of triangulated categories of geometric origin. The point of view of derived geometry helps to get a better grip on classical items like the Coxeter element and also provides more conceptual proofs. This theory is related to the Homological Mirror Symmetry in the Landau-Ginzburg setting.

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