

SFB-Seminartag

TIME:

23rd October 2007, 4:00 – 7:00 pm

LOCATION:

Humboldt-Universität zu Berlin Invalidenstraße 42, Nordbau, Hörsaal 8

PROGRAM:

4:00 – 5:00 pm **NIKLAS BEISERT** (AEI POTSDAM)

Spectral Curve for the Heisenberg Ferromagnet and AdS/CFT

5:00 – 5:30 pm Break/ Kaffeepause

5:30 – 6:30 pm **ALEXANDER SCHMITT** (UNIVERSITY OF DUISBURG-ESSEN)

On quiver representations

A quiver is a combinatorial object which consists of vertices and arrows between the vertices. In representation theory, one studies representations of quivers. These assign to each vertex a finite dimensional complex vector space and to each arrow a linear map from the vector space at the tail of the arrow to the vector space at its head. If one fixes the dimensions of the vector spaces, one obtains nice moduli spaces for the isomorphy classes of quiver representations. One can go one step further and associate to each vertex a coherent sheaf and to each arrow a sheaf homomorphism. The theory of moduli spaces for these objects has been recently developed by Alvarez-Consul/Garcia-Prada, Gothen/King, and the speaker. It has interesting links to gauge theory and representations of fundamental groups.

In the talk, we will present several aspects of the above topics.