Leibniz Universität Hannover

Fakultät für Mathematik und Physik
Appelstr. 2, 30167 Hannover

Mathematisch-Physikalisches Kolloquium

am **20.05.2008** um **17:15** Uhr
im Kleinen Physikhörsaal (F342, Welfengarten 1)

Quivers with potentials and their representations

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Abstract:

This is an account of an ongoing joint work with Harm Derksen and Jerzy Weyman.

We study quivers with relations given by non-commutative analogs of Jacobian ideals in the complete path algebra. This framework allows us to give a representation-theoretic interpretation of quiver mutations at arbitrary vertices. This gives a far-reaching generalization of Bernstein-Gelfand-Ponomarev reflection functors. The motivations for this work come from several sources: superpotentials in physics, Calabi-Yau algebras, cluster algebras.

Eingeladen von Prof. Dr. Ch. Bessenrodt