Seminar

Prof. Jørgen Andersen

U Aarhus

Quantum representations of mapping class groups via geometric quantization of moduli spaces

Monday, February 24, 2014

at 16:00 h

ESI, Boltzmann Lecture Hall

Abstract: We will describe how the Reshetikhin-Turaev quantum representations of mapping class groups are constructed by applying geometric quantization to the moduli space of flat SU(n)-connections on the surface. We will further show how we can generalise this to also apply geometric quantization to the moduli space of flat SL(n,C)-connections to obtain new infinite dimensional quantum representations of mapping class groups corresponding to quantum Chern-Simons theory for the gauge group SL(n,C).

J. Fuchs, L. Katzarkov, N. Reshetikhin, C. Schweigert

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