

Mathematics and CS Seminar

Symmetries of convolution categories and the quantum Ngo action

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Host: Tamas Hausel

I will describe a remarkable symmetric monoidal category - the Kostant-Whittaker category - associated to a reductive group G, which acts centrally on any G-category. The Kostant-Whittaker category may be interpreted as a quantization of the universal centralizer group scheme, and its central action gives a quantization of a certain homorphism defined by Ngo. The category and its central action appear most naturally in a Langlands dual incarnation, which is phrased in terms of convolution on the affine Grassmannian, via work of Bezrukavnikov, Finkelberg and Mirkovic. There is also a purely combinatorial incarnation which involves the affine Nil-Hecke algebra and Soergel bimodules for the affine Weyl group. If there is time I will describe a potential application to a certain TQFT which computes the homology of character stacks. This is joint work with David Ben-Zvi and David Nadler.

Thursday, November 30, 2017 01:00pm - 03:00pm

Big Seminar room Ground floor / Office Bldg West (I21.EG.101)



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