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Representation and Number Theory Seminar

Filtered D-modules, Categorical Traces, and Koszul Duality

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Abstract

We will state a Koszul duality between filtered D-modules and circle equivariant sheaves on loop spaces for stacks after reviewing some of the requisite background. We will then compute some basic examples, give an indication of where one might find these mysterious sheaves on loop spaces in nature (i.e. around categorical traces), and discuss potential applications (still in progress) to the categorical and geometric local Langlands correspondences.

> Date : 4 April 2023 (Tuesday)

Time 4:00pm - 5:30pm

Room 219, Lady Shaw Building, CUHK Venue