Seminar/Talk

Relating the Quantum connection and the Quantization of Symplectically Dual Spaces

Michael McBreen

MIT

Host: Tamas Hausel

I will discuss joint work with Joel Kamnitzer and Nick Proudfoot. Symplectic resolutions are a class of symplectic varieties playing a major role in geometric representation theory. They tend to come in symplectically dual pairs. To any such resolution X we can attach two natural D-modules; the quantum connection arises from the enumerative geometry of X, whereas the Harish-Chandra D-module arises from the representation theory of the quantization of X. We conjecture (and prove in a number of cases) a relationship between these D-modules for symplectically dual pairs. No knowledge of quantum connections or symplectic resolutions will be presumed.

Thursday, November 9, 2017 02:00pm - 04:00pm

Mondi Seminar Room 2, Central Building