Geometric quantization of symplectic b-manifold

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Abstract:

In this talk, I will discuss one method of geometric quantization for compact b-symplectic manifolds in terms of the index of Dirac operators. Under an orientation hypothesis, our method also applies to manifold with simple normal crossing singularities. I will also talk about the "quantization commutes with reduction" principle in this setting. This is a joint work with Braverman, Loizides, Lin and Sjamaar.