

Tom Nevins: D-modules on stacks from the GIT point of view

Equivariant D-modules, and more general D-modules on algebraic stacks, play many roles in algebraic geometry and geometric representation theory. I will explain how ideas and tools from geometric invariant theory can shed light on vanishing theorems, the derived category of D-modules on a stack, and the topology of GIT quotients. The talk is based on joint works with G. Bellamy, C. Dodd, and K. McGerty.