

# Topology Seminar

**Bertrand Toën**

of Université de Montpellier will be speaking on

## Quantization of derived moduli spaces

on April 18 at 4:30 in  
MIT Room 2-131

I will report on a work in progress in collaboration with Pantev-Vaquié-Vezzosi. The central notion will be of a shifted symplectic structure on a derived scheme or derived stack, which I will explain in details. The main result is an existence statement of shifted symplectic structures on derived mapping spaces toward a symplectic target, that will be used to construct many examples (moduli of sheaves on  $CY$  varieties, moduli of representation of  $\pi_1$  of a compact oriented manifold, Lagrangian intersections ...). Finally, I will explain what quantization means in this context as well the general strategy to prove existence of canonical quantizations.