

Renata Picciotto : The derived moduli of sections and virtual pushforwards

jeudi 15 juin 2023 14:00 (1 heure)

Derived algebraic geometry provides a powerful set of tools to enumerative geometers, giving geometric spaces which encode the “virtual structures” of the moduli problems. I will discuss a joint work with D. Karn, E. Mann and C. Manolache in which we define a derived enhancement for the moduli space of sections. This enriched space neatly encodes the perfect obstruction theory and virtual structure sheaves of many theories. Special cases include Gromov-Witten and quasimaps theories. To illustrate the potential of this approach, I will explain how we use local derived charts to prove a virtual pushforward formula between stable maps and quasimaps without relying on torus localization.