ANDREW NEITZKE, Harvard University, Cambridge, MA
BPS Microstates and the Open Topological String Wave Function

I will describe recent joint work with Mina Aganagic and Cumrun Vafa, which reinterprets the square of the open topological string wave function (also known as the generating function for open Gromov–Witten invariants) in terms of counting supersymmetric microstates localized on a stringy defect in a gravitational theory in 4 dimensions. I will also sketch the sense in which the wave function property of the topological string, which plays a crucial role in this work, is related to integrability.