Non-archimedean Quantum K-theory and Gromov-Witten invariants

Tony Yue Yu

Motivated by mirror symmetry and the enumeration of curves with boundaries, it is desirable to develop a theory of Gromov-Witten invariants in the setting of non-archimedean geometry. I will explain the recent works in this direction. Our approach is based on derived geometry, which also gives a new viewpoint towards classical algebraic Gromov-Witten invariants. Joint work with M Porta.

Talk 1: Motivations: non-archimedean approach towards the SYZ conjecture in mirror symmetry

Talk 2: Introduction to derived geometry

Talk 3: Gromov-Witten theory via derived geometry