Speaker: Yang Li

Title: Metric SYZ conjecture

Abstract: The metric aspect of the Strominger-Yau-Zaslow conjecture asks for the existence of special Lagrangian torus fibrations on the generic region of the Calabi-Yau manifolds near the large complex structure limit. It was shown recently that the conjecture holds for a handful of examples, including the Fermat family, and there is a more general sufficient criterion reducing the metric SYZ conjecture to non-archimedean geometry. There will be four lectures, concerning the introductory background on SYZ, the analytic techniques, and the non-archimedean geometry backgroud, which will be finally combined into a proof outline.