

Virtual visiting day (3/7) schedule. Preliminary version.

9.20-9.30: Meet and greet. A short address by the DGS.

9.30-9.45: Q&A, part 1.

9.45-10.15: A mini-talk by Dongryul Kim, *Rigidity of hyperbolic manifolds via higher-rank dynamics*

Abstract: The rigidity of finite-volume (locally symmetric) spaces was established through the pioneering works of Professor Mostow and Professor Margulis at Yale, now known as Mostow's strong rigidity and Margulis' superrigidity. In this talk, I will present my joint work with my advisor, Professor Oh, on rigidity theorems for infinite-volume hyperbolic manifolds. By connecting a rigidity problem in hyperbolic geometry to a dynamical question on higher-rank spaces, we leveraged higher-rank dynamics and proved a new rigidity theorem for hyperbolic manifolds, which are of rank one.

10.15-10.30: Q&A, part 2.

10.30-11: A mini-talk by Prof. Ivan Losev: *The ubiquitous Hilbert scheme of points on the plane*.

Abstract: The Hilbert scheme of points on the plane is one of the nicest “moduli spaces” in Algebraic geometry, it is a variety whose points parameterize ideals of given codimension in the algebra of polynomials in two variables. Surprisingly, it is also of importance for Combinatorics, Knot theory and Representation theory. In this talk I will define the Hilbert scheme and discuss some of these connections.

11-12: Q&A, part 3/ free discussion/ TBA.