Abstract:
Very often in algebraic geometry, the totality of geometric objects under some natural setting becomes again an algebraic variety, which is one the main object of study in algebraic geometry. Hilbert scheme is one of such space parametrizing families of projective algebraic varieties having the same fixed Hilbert polynomial, i.e. sharing certain basic extrinsic attributes and intrinsic invariants. In this talk we will start with the basic construction of the Hilbert scheme of projective algebraic curves due to Alexander Grothendieck. We then proceed further and discuss about the current state of affairs especially on the irreducibility and the rigidity of the Hilbert scheme of smooth projective curves after reviewing a brief history of the study since the era of Italian school.

Special Note:
There will be a pre-talk at 2:30pm

Host: James McKernan

Friday, January 19, 2018
3:00 PM
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