ELLIPTIC COHOMOLOGY IN ENUMERATIVE GEOMETRY

Speaker: Okounkov (Columbia University)

Time: Thu., Aug. 15th, 13:30-14:30PM/15:00-16:00PM

Venue: Room 106, SCMS

Abstract:

Enumerative geometry is full of generating functions over the degrees and genera of objects being enumerated, and it is a standard and important question in the field to be able to say something global about the behavior of these generating functions. In special, but very important cases, such understanding can be achieved in a such a way that it identifies the parameters of the generating functions with certain natural parameters for elliptic cohomology classes for the target variety X. Interestingly, it equates the result of "quantum" computation, to which all degrees/genera are contributing, with a "classical" computation in equivariant elliptic cohomology. The first two lecture is to explain the nature of the this connection.