

## **abstract**

Members Seminar  
Topic:

Speaker:

Affiliation:

Date:

Time/Room:

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Enumerative geometry is a classical subject often concerned with enumeration of complex curves of various types in projective manifolds under suitable regularity conditions. However, these conditions rarely hold. On the other hand, Gromov-Witten invariants of a compact symplectic manifold are certain virtual counts of J-holomorphic curves. These rational numbers are rarely integer, but are generally believed to be related to some integer counts. In string theory, these counts are known as instanton numbers and BPS states; in mathematics, they should represent counts of J-holomorphic curves for a generic almost complex structure J. The aim of this talk is to give an indication of how Gromov-Witten invariants are expected (and occasionally) known to give rise to integer counts of curves.