

abstract

Joint IAS-PU Symplectic Geometry Seminar
Topic:

Speaker:

Affiliation:

Date:

Time/Room:

Welschinger invariants, real analogs of genus 0 Gromov-Witten invariants, provide non-trivial lower bounds in real algebraic geometry. In this talk I will explain how to get some wall-crossing formulas relating Welschinger invariants of the same (up to deformation) rational algebraic surface with different real structures. This relation is obtained via a real version of a formula by Abramovich and Bertram which computes Gromov-Witten invariants using deformations of complex structures. It can also be seen as a real version, in our special case, of Ionel and Parker's symplectic sum formula. If time permits, I will give some qualitative consequences of this study, for example the vanishing of Welschinger invariants in some cases, and will discuss some generalizations. This is joint work with Nicolas Puignau (UFRJ, Rio de Janeiro)