Amanda HIRSCHI (Sorbonne Université)

Title: On stabilisations of symplectic 4-manifolds

Abstract: The Donaldson 4-6 question asks how deformation classes of stabilised symplectic forms, i.e. after taking the product with S², are related to the underlying smooth structures on the underlying smooth manifold in dimension 4. I will describe one example of a smooth 4-manifold admitting two symplectic forms which remain deformation inequivalent after taking the product with S², giving counterexamples to one implication of the conjectured relation. On the other hand, I will explain why two symplectic manifolds, whose stabilisations are deformation equivalent. have the same Gromov-Witten invariants. This is joint work with Luya Wang.