

GEOMETRY seminar

YANG-MILLS-HIGGS FLOW AND GIT FOR THE VORTEX EQUATION

PLACE: Sala Naranja, ICMAT (Campus de Cantoblanco)

DATE: Wednesday, 24th January, 2018 - 11:30 h

SPEAKER: Samuel Trautwein (ETH, Zurich)

ABSTRACT: The symplectic vortex equations admit a variational description as global minimum of the Yang-Mills-Higgs functional. We discuss convergence of its gradient flow on holomorphic pairs and explain how this can be used to obtain several results inspired by finite dimensional GIT: The analogue of the Ness uniqueness theorem, the moment-weight inequality, the Kempf existence and uniqueness theorem and an extension of Mundet's Kobayashi-Hitchin correspondence to the polystable and semistable case.