Area dependence for gauged Gromov-Witten invariants

Eduardo Gonzalez
(UMass Boston)

Monday, Feb. 22, 3-4 pm in MCS 135
Tea 2:45-3 in MCS 153

Abstract: Let $X$ be a symplectic space with a hamiltonian action of a compact connected Lie group $G$ and $\Sigma$ a connected Riemann Surface. We will define (in some particular cases) gauged Gromov-Witten invariants using the vortex equation on $\Sigma$ with values in $X$. These invariants can be understood as the equivariant Gromov-Witten invariants of the quotient $[X/G]$. We will also describe a wall crossing formula by analysing the dependence on the area parameter of $\Sigma$. If time permits we will study the limit $\epsilon \to \infty$. This is joint work with C. Woodward.