Jalal Shatah GEOMETRIC EVOLUTION EQUATIONS

Dispersive geometric evolution equations have received much attention in the past few decades. Some of these equations describe the dynamics of micromagnetics, vortex motion in liquid crystals, or vibrations of certain crystalline lattices. In this talk we will present some recent results on the equations describing ferromagnetic and anti-ferromagnetic materials concerning existence of solutions and the relation between anti-ferromagnetic equations (Schrodinger maps) and wave maps.