

1135-58-2090 **Marco A Guaraco*** (guaraco@uchicago.edu). *Geometric Aspects of the Allen-Cahn Equation on closed manifolds.*

In this talk I will discuss both local and global properties of the stationary Allen-Cahn equation in closed manifolds. This equation arising from the theory of phase transitions has a strong connection with the theory of minimal hypersurfaces. I will summarize recent results regarding the analogy between both theories with focusing on min-max constructions and the multiplicity of transitions layers. (Received September 25, 2017)