## TEMPLE UNIVERSITY

Department of Mathematics

## **Analysis Seminar**

Room 617 Wachman Hall Monday, April 17, 2017, 2:40 p.m.

Singular perturbation limits of fractional Allen-Cahn

by Yannick Sire Johns Hopkins University

Abstract: I will report on recent work with V. Millot and K. Wang on the singular limit for a fractional Allen-Cahn equation leading to stationary nonlocal minimal surfaces. I will introduce these latter concepts and will prove the convergence result, based on a deep Geometric Theory argument from Marstrand.