AMS-UMI International
Joint Meeting 2024
Palermo, July 23–26, 2024

Geometric variational models with nonlocal energies
Special Session A6

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Nonlocal geometric variational models have attracted significant attention in recent years. Nonlocal interactions are ubiquitous in physical models, from material science to chemistry and biology. The pertinence of nonlocal geometric models is that they naturally introduce length scales, which then are used to investigate the geometry of microstructures in macroscopic domains. The study of such models is a very active research direction, aiming at understanding e.g.: collective behavior in biological systems; the geometry of phase transitions/singularities of steady states for a large class of PDEs; the mechanisms behind pattern formation in self-organizing systems induced by competing short-range attractive/long-range repulsive interactions. The aim of this session is to bring together leading experts from US, Italy and Europe working on complementary and interconnected problems in the field, so as to favour fruitful interactions and collaborations.

For more information visit `https://sites.google.com/view/ams-umi-geom-var/`.

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