

FLACAM 2019

French Latin - American Conference on New Trends in Applied Mathematics
5 - 8 November, Santiago – Chile

<http://eventos.cmm.uchile.cl/flacam2019/>

Phase transitions and symmetry in PDEs

Jean Dolbeault (Université Paris-Dauphine, France)

Abstract: The question of the symmetry of the solutions of a PDE which is invariant under a transformation is a fascinating question. If a PDE is invariant under rotations, when do we know that solutions, for instance the solutions which minimize the energy, inherit of radial symmetry? This lecture is intended to review some problems and partial answers to these questions, with a special emphasis on problems at the interface of an elliptic point of view, interpreted as the description of stationary solutions, and a dynamical approach based on related equations of evolution.