



THE HONG KONG UNIVERSITY OF SCIENCE & TECHNOLOGY

Department of Mathematics

SEMINAR ON PDE

On crystallization in the plane for pair potentials with an arbitrary norm

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Abstract

Imagine N points on the plane interacting through a pair potential depending on distances, i.e. on the chosen norm. Imagine now that you want to minimize the potential energy of such system and that you wish optimal point configurations to be on a periodic structure, as atoms on a crystal. This is called a crystallization problem. What kind of potential should you choose to get such phenomenon? How the minimizing structure depends on the chosen norm? This is obviously a deep and complicated question that I will discuss in this talk, based on a joint work with Camille Furlanetto (Université Lyon 1).

Date: 27 February 2025 (Thursday)

Time: 4:00pm

Zoom Meeting: <https://hkust.zoom.us/j/91694213932> (Passcode: 821196)

All are Welcome!