

## **Sylvia Serfaty: Vortex lines in 3D Ginzburg-Landau with magnetic field**

*lundi 19 juin 2023 09:00 (50 minutes)*

In joint work with Carlos Román and Etienne Sandier, we study the onset of vortex lines in the three-dimensional Ginzburg-Landau model of superconductivity. We discuss the critical field at which the first lines appear, which is naturally connected to an “isoflux” problem. We study the optimal number of lines, their interaction, and derive a  $(\Gamma)$ -limit problem for their arrangement.