报告题目：Nonlocal Navier-Stokes-Cahn-Hilliard Systems

报告人：Prof. Maurizio Grasselli（Politecnico di Milano）

报告时间：2024 年 5 月 14 日星期二，10：30—11：30

报告地点：光华东主楼 2001

报告摘要 :The so-called Navier-Stokes-Cahn-Hilliard system is a well-known diffuse interface model which describes phase separation in incompressible, isothermal, binary fluids. This system consists of the Navier-Stokes equations nonlinearly coupled with an advective Cahn-Hilliard equation. In this talk, instead of taking the usual free energy functional, I consider a nonlocal version. Therefore, the resulting Cahn-Hilliard equation is a second-order (spatially) nonlocal equation. I will mostly focus on a model with unmatched densities studied jointly with C.G. Gal, A. Giorgini, and A. Poiatti (2023). Nonetheless, further results and open issues will also be discussed.