

Online Seminar on Chemotaxis

Date: 20th of October 2022 10:00 – 11:00 in “Central EU” hour
(which is 16:00 – 17:00 in “Beijing” hour and 17:00 – 18:00 in “Seoul–Tokyo” hour)

Speaker: Philippe Laurençot (CNRS & Université Savoie Mont Blanc)

Title: Threshold behaviour in chemotaxis models with indirect signal production in space dimension 2

Abstract:

In the classical two-dimensional Keller-Segel chemotaxis model, the chemoattractant is produced directly by the cells, resulting in finite time singularities for suitably “large” initial data. It is known that this phenomenon is delayed to infinite time [Tao & Winkler, 2017] or even prevented [Fujie & Senba, 2017] when the attractant is produced by an intermediate species. Some results in that direction will be presented for the two-dimensional Keller-Segel chemotaxis model with indirect signal production and a related model with split population (joint work with Christian Stinner).

Organizers: Jie Jiang (jiang@apm.ac.cn) and Kentaro Fujie (fujie@tohoku.ac.jp)