

# Online Seminar on Chemotaxis

Date: 28th of March 2023 16:00 – 17:00 in “Beijing” hour  
(which is 10:00 – 11:00 in “Central EU” hour and 17:00 – 18:00 in “Seoul–Tokyo” hour)

Speaker: Zhaoyin Xiang (University of Electronic Science and Technology of China)

Title: Critical mass in a 2D chemotaxis system with indirect signal production mechanism

Abstract:

In this talk, I will present a critical mass phenomenon in a 2D chemotaxis model with indirect signal production mechanism. The first result shows that for any suitably regular initial data, the system admits global classical solution, which is different from the classical Keller-Segel system with direct signal production mechanism. The second result confirms that for all radially symmetric initial data smaller than the critical value, the solutions are globally bounded, while for any initial mass larger than the critical value, unbounded global solutions can be constructed. This is a joint work with Dr. Lan Yang.

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