

## Haocheng Yang (NYU Abu Dhabi)

**Title:** On the Boundary Control of Point Vortex System.

**Abstract:** This talk presents recent progress on the boundary control problem for point vortex systems. The central question we address is whether the motion of point vortices can be governed by applying controls to a subset of the boundary. For time-varying controls, we construct a smooth control function such that point vortices move exactly along any admissible trajectory. In the time-independent case, we provide examples of exact controllability for a single point vortex. This is an ongoing joint work with Taoufik Hmidi and Kaïs Ammari.