

KAM theory in active scalar equations

박재민 박사

University of Basel

Abstract : Tautologically, a smooth, steady fluid remains smooth for all time since it does not evolve non-trivially in time. A natural question is whether a small perturbation of such a smooth steady state can also remain smooth for all time.

Especially, when the well-posedness of the governing equation is in question, the investigation of initial data near stable steady states can give insight into potential global-in-time solutions.

In this talk, we will discuss the construction of global solutions to the generalized surface quasi-geostrophic equations (gSQG) by means of KAM theory. This is a joint work with Javier Gomez-Serrano and Alexandru Ionescu.

2023.01.10 (Tue) 14:00
Science Building #225
Yonsei University



연세대학교 수학기산학부

주최: 4단계 BK21 수리과학 및 계산 교육연구단,
수리과학연구소