

Inwon Kim, MIT.

"The Regularity and Speed of the Hele-Shaw Problem"

ABSTRACT:

I will talk about joint work with Sunhi Choi and David Jerison in which we prove that for small positive time, the solution to the one-phase Hele-Shaw flow, starting from an initial surface with small Lipschitz constant, is smooth. Along the way we obtain upper and lower bounds on the speed of the free boundary in terms of the initial data.