ON GLOBAL REGULARITY AND BOUNDARY LAYER SEPARATION OF STEADY PRANDTL EQUATIONS

Speaker: Yue Wang
Capital Normal University

Time：Tue, May 11, 15:00-17:00

Tencent ID：222 349 637

Abstract: For the 2-D steady Prandtl Equations, Oleinik proved the global-in-x existence of solutions with finite order regularity in the case of favorable pressure gradient and the local-in-x existence of solutions in the case of adverse pressure gradient. In this talk, I will first review some related results and then report our recent works for the 2-D steady Prandtl Equations where 1. we proved the global C^∞ regularity in the case of favorable pressure gradient; 2. we proved the boundary layer separation for a large class of Oleinik's solutions and study the local behavior of the solutions near the separation in the case of adverse pressure gradient.