



复旦大学数学科学学院 数学综合报告会

报告题目: Nonhomogeneous boundary value problem for the steady Navier-Stokes equations with the perfect slip boundary condition in an annulus

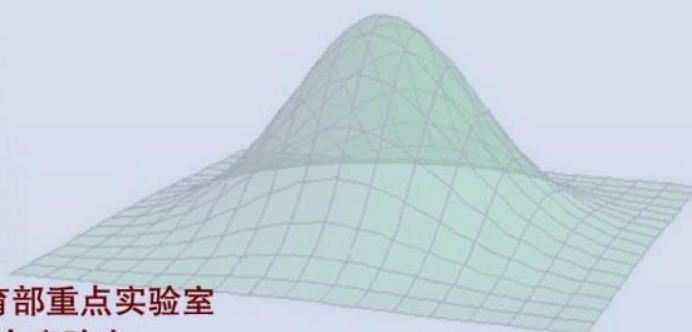
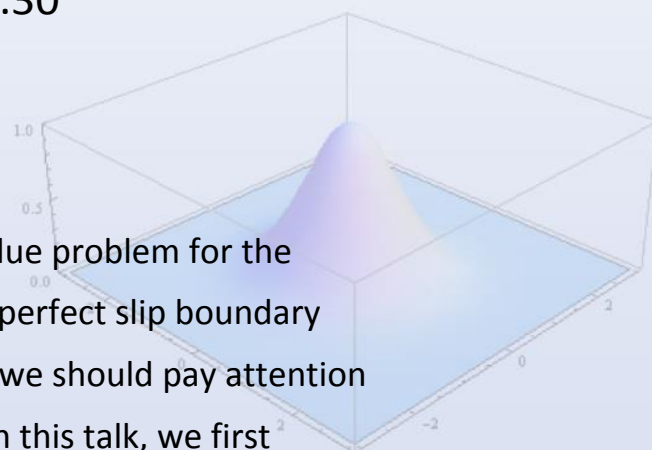
报告人: Tatsuki Yamamoto (Institute of Science Tokyo, Japan)

时间: 2026-10-14 星期三 15:30-16:30

地点: 光华楼东主楼1513

报告摘要:

We consider the nonhomogeneous boundary value problem for the steady-state Navier-Stokes equations under the perfect slip boundary condition in an annulus. In such a circumstance, we should pay attention to the presence of the nontrivial rigid motions. In this talk, we first present an appropriate formulation designed to deal with the nontrivial rigid motions and then show that the problem is solvable if the flux of the boundary datum through the outer boundary is nonzero and greater than some negative constant, which particularly depends on the profile of the boundary datum.



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