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Sameer Iyer is an Assistant Professor in the Department of Mathematics, UC Davis. He obtained his Ph.D from Brown University in 2018. He was then an NSF Postdoctoral Research Fellow at Princeton University from 2018-2021. Since 2021, he has been at UC Davis. His research expertise is in nonlinear partial differential equations and asymptotic problems in fluid dynamics.

Title: Uniform Inviscid Damping and Inviscid Limit of 2D Navier-Stokes with Navier Boundary Conditions

Abstract:
We present a recent series of works, joint with J. Bedrossian, S. He, F. Wang, in which we prove nonlinear inviscid damping, enhanced dissipation, and inviscid limit for the 2D Navier-Stokes equations near Couette. The domain is the periodic channel, $\mathbb{T} \times [-1,1]$, and Navier Boundary Conditions are prescribed vertically.