



ICTS Seminar

Title : Stratified Stokes flow over a cylinder

Speaker : Jim Thomas (University of North Carolina at Chapel Hill, USA)

Date : Thursday, 18th February 2021

Time : 06:00 pm (IST)

Abstract : Fluid dynamics in the low Reynolds number regime is governed by what are known as Stokes equations. The linearity of the Stokes equations has resulted in significantly more advances in low Reynolds number fluid dynamics when compared with the research progress in high Reynolds number flows. At small dissipative scales in the ocean, although viscous effects dominate, leading to Stokes regime, quite often density stratification is significant. This results in stratified Stokes flow. The incorporation of stratification leads to significant differences when compared to unstratified homogeneous Stokes flow. Closed streamlines and rapid decay of localized disturbances is a feature of stratified Stokes flow. In this talk I will present some of the features of stratified Stokes flow using the flow over a cylinder as a specific case.

Venue : Please click on the link to join the meeting.

<https://zoom.us/j/93725989131?pwd=WUI4cG1PM0IyblFQQ3RVclo5RXFVZz09>

Meeting ID: 937 2598 9131

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