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Research Vortex Dynamics, Geophysical Fluid Dynamics, Applied Mathematics. Interests [2022-Present] Indian Institute of Technology, Hyderabad **EDUCATION** Ph.D., Department of Mathematics CGPA: 9.5/10 Advisor: Dr. Vikas S. Krishnamurthy [2019-2021] Indian Institute of Technology (ISM), Dhanbad M.Sc., Department of Mathematics & Computing CGPA: 9.53/10 (Passed with First Class) [2015-2018] Jadavpur University B.Sc.(Honors), Mathematics Percentage: 89.42 (Passed with First Class) Research Department of Mathematics, IIT Hyderabad EXPERIENCE □ Current Work: Vortex Equilibrium Solutions of the Incompressible Euler Equation Manuscript under preparation Advisor: Dr. Vikas S. Krishnamurthy July 2022 - Present Department of Mathematics & Computing, IIT(ISM), Dhanbad ☐ Thesis: Impact of Lockdown on the Transmission of COVID-19 in India Advisor: Prof. Ranjit Kumar Upadhyay January 2021 - May 2021 International Centre for Theoretical Sciences, ICTS-TIFR, Bangalore Intern, Summer Research Fellowship Program, 2017 ☐ Project: Phase Space Reconstruction of Nonlinear Systems Based on Data June 2017 - August 2017 Advisor: Prof. Amit Apte CONFERENCES AND [May, 2025] Physics-Driven Machine Learning for Fluid Dynamics with Spe-Workshops cial Reference to Weather Prediction (Online) ABV-IIITM Gwalior, India [February, 2025] Hydrodynamics and Critical Convection in Liquid Cores of Terrestrial Planets (GIAN course) NIT Warangal, India [July, 2024] Recent Advances in Applied Mathematics (RAAM) IIT (BHU), Varanasi, India [June, 2024] Mathematical Analysis of Fluid Flow Models TIFR-CAM, Bangalore, India [December, 2023] Vortex Dynamics: the Crossroads of Mathematics, Physics and Applications (Online) IASM, Hangzhou, China ACHIEVEMENTS ☐ All India Rank 25 in CSIR-NET Lectureship (2021) □ All India Rank 278 in GATE, 2021 ☐ All India Rank 374 in IIT-JAM, 2019 □ Recipient of INSPIRE scholarship (2015-2018)