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Scientific Data Mining Techniques for Extracting Information from Simulations

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Abstract

Techniques from scientific data mining have long been used for the analysis of data from various domains including astronomy, remote sensing, materials science, and simulations of turbulence in fluids and plasma. In this talk, I will present some of my work in classification of orbits in Poincare plots in fusion simulations, analysis of coherent structures in Rayleigh-Taylor instability, and comparison of experiments and simulations in Richtmyer-Meshkov instability.