

Adam Mickiewicz University
Faculty of Mathematics and Computer Science

GEOMETRY AND TOPOLOGY SEMINAR

13:45 AM, Tuesday, April 24, 2018
B1-37, Collegium Mathematicum

Speaker: Michał Jarząbek (Adam Mickiewicz University)

Title: Spectral numerical methods for fluid simulation

Abstract:

I will introduce the Navier-Stokes equations as a mathematical model of fluid dynamics and review some numerical methods used to compute approximate solutions. The focus will be on spectral methods, and especially on a construction of a frame of divergence-free wavelets that can be used to represent the fluid's velocity in a numerical simulation.