

# Souleymane Kadri-Harouna

**Title:** Borel-Laplace resummation and wavelet methods for Navier-Stokes equations

**Abstract:** This presentation focuses on a high-order spatio-temporal numerical scheme for solving the Navier-Stokes equations. The temporal discretisation is based on time-series decomposition, followed by the resummation of divergent series using the Borel method. The spatial discretisation uses divergence-free wavelets. This decouples velocity computation from pressure, eliminating the need to solve a Poisson equation with artificial boundary conditions.