Short course on

## Introduction to the Basilisk code

an open-source software for the solution of partial differential equations on adaptive Cartesian meshes (website: http://basilisk.fr/)

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Detail of an atomizing pulsed jet, interface colored by axial velocity, simulation using Basilisk (code authored by Stéphane Popinet, run and analyzed by Raphaël Villiers and Yash Kulkarni)

Prof. Stéphane Zaleski investigates various numerical methods for the simulation of multiphase flow with applications to atomization, cavitation, porous media flow, boiling, hydrometallurgy and droplet impact. He has written several computer codes for the simulation of two-phase flow including PARIS Simulator (with R. Scardovelli and G. Tryggvason). In 2019 he was granted the advanced ERC TRUFLOW (TRansfers at tiny scales in tUrbulent multiphase FLOW).

Room 5.1 (Viale Risorgimento, 2) Dates: 12/4, 19/4, 26/4, 3/5 Hours: 14-18 Local contact: **ruben.scardovelli@unibo.it**