Mathematical Topics in Fluid Mechanics and Applications

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Course Content

[1] Physics of the Navier-Stokes Equations

[2] Preliminary Analytical Tools

[3] Time-Dependent Navier-Stokes Equations
     in Bounded Domains

[4] Proof of the Leray-Hopf Existence Theorem

[5] Higher Integrability and Consequences

[6] Recovering the Pressure

[7] A Short Introduction to Partial Regularity

[8] Applications and Open Problems

Course Outline

This new course, offered jointly by the Department of Mathematics and Collegio A Volta, is open to all students enrolled at the University of Pavia.

Students of Lauree Magistrali in Matematica, Scienze Fisiche, Chimica, Electronic Engineering and Ingegneria Civile may include this course in their study plan for 6 credits (ECTS).

Course Language
English

Venue and Time
In the College lecture theatre on Mondays/Thursdays at 6.00 pm starting on 20th March 2023 in Seminar Room 1