# Steady Problems in Fluid Dynamics and Elasticity

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# Contents:

- Steady problems for the Navier-Stokes equations: basic questions.
- The functional spaces of hydrodynamics. Hydrodynamic potentials.
- The steady boundary value problem for the Stokes equation.
- Existence and uniqueness in bounded and exterior domains.
- The steady boundary value problem for the Navier-Stokes equations in bounded and exterior domains.
- The boundary value problem in elastostatics.
- Recent results on steady problems in fluid dynamics and elasticity in bounded and exterior domains.

# Program

The lectures are organized as follows: Wednesday February 19<sup>th</sup>, 2020:

• 14.30 - 17.30 (with floating coffee break)

# Thursday February 20<sup>th</sup>, 2020:

- 9.30 12.30 (with floating coffee break)
- 13 Lunch
- 15 18 (with floating coffee break)
- 19.30 Social Dinner

# Friday February 21<sup>st</sup>, 2020:

• 9.30 - 12.30 (with floating coffee break)

# Application

Those who are interested are kindly requested to write an e-mail to: alfredo.marzocchi@unicatt.it and/or giulia.giantesio@unicatt.it No participation fee is required. https://www.dmf.unicatt.it/merla/

# Series of lectures

**February 19-20-21, 2020 Aula 2 Università Cattolica del Sacro Cuore** Via Musei 41 - Brescia





