



UNIVERSITÀ DEGLI STUDI DELL'AQUILA

Prof. Andrea Di Mascio

Curriculum scientifico

(Aggiornato il 2022/06/14)

EDUCATION AND QUALIFICATION

- **1987**
Master degree in Aeronautical Engineering ? University of Rome ?Sapienza? - Italy - Score: 110/110 cum laude
- **1987** Granted of the Engineering License by Professional Practice Examination.
- **1992** Ph.D. in ?Theoretical and Applied Mechanics? ? University of Rome ?Sapienza? - Italy
- **2003** Granted by National Examination as Research Director at INSEAN - Rome - Italy
- **2014** Granted by ANVUR of the National Scientific Qualification as Full Professor of Aeronautical, Aerospace and Naval Engineering (SC: 09/A1)

PROFESSIONAL HISTORY

- **1987-1988** *SNIA-BPD - FIAT Group (Present company name: Avio S.p.A.) - Italy*

Position: Researcher at the Research and Development Unit

Research activity: Algorithms for the simulation of high-temperature high-speed compressible flows in solid-propeller engines. Combustion.

- **1989-1991** *University of Rome ?Sapienza? ? Italy*

Position: Ph.D. Student in ?Theoretical and Applied Mechanics?

Research activity: numerical simulation of transonic flows, high order non-oscillatory schemes, shock-induced separation, flow instabilities.

- **1991-2011** *Istituto Nazionale per Studi ed Esperienze di Architettura Navale (INSEAN) - Rome - Italy*

Position: Researcher; from 1997: Senior Researcher

Research activity: numerical algorithms for the simulation of free surface potential and viscous flows, zonal approach for high Reynolds number flows, multi-grid algorithms, multi-block algorithms, turbulence modeling, geophysical flows, two-phase flows, level set techniques, wave breaking modeling, dynamic over-set grids, aeroacoustics, sea-keeping, maneuverability, parallel computing.

- **2011-2018** Istituto per le Applicazioni del Calcolo "Mauro Picone" - Consiglio Nazionale delle Ricerche (*IAC-CNR*) - Rome - Italy

Position: Senior Researcher

Research activity: Wave breaking with high fragmentation. Flows around marine propellers and wind turbines. Particle methods. Zonal-approach and Domain-Decomposition approaches. Transonic and supersonic flows.

- **2018-present** *Università degli Studi dell'Aquila - Department of Industrial and Information Engineering and Economics* ? L'Aquila - Italy

Position: Full professor of Fluid Mechanics

Research activity: Flows in rotating machines. Particle methods. Domain-Decomposition approaches. Transonic and supersonic flows.

COURSES TAUGHT

- **CFD methods for high-speed flows** (*in English*)

Period: 2005-2018

Level: Second-level Master degree in ?Space Transportation Systems?

University: University of Roma ?Sapienza? - Italy

- **Fluidodinamica** (*in italian; En.: Fluid Dynamics*)

Period: 2018-present

Level: Bachelor degree in ?Industrial Engineering?

University: Università degli Studi dell'Aquila ? L'Aquila - Italy

- **Fluidodinamica Computazionale** (*in italian; En.: Computational Fluid Dynamics*)

Period: 2018-present

Level: Master degree in ?Mechanical Engineering"

University: Università degli Studi dell'Aquila ? L'Aquila - Italy

PUBLICATION AND CITATIONS. Click on the links below

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