

Name

Carmine De Bartolo

Role

Assistant Professor

Short CV

Carmine De Bartolo was born in Vibo Valentia, Italy on February 7th 1967. He graduated in Mechanical Engineering at the University of Calabria, Italy, in 1991 and received a Ph.D. degree from the University of Genova, Italy, in 1995. From 1996 to 2001 he was assistant professor of hydraulic and thermal machines at the University of Pavia. From 2001 he is assistant professor at the University of Calabria. He is member of the doctoral school Life Sciences. He is scientific responsible of research activities for the Center of Excellence on High Performance Computing at the University of Calabria. He is author of more than 50 publications including articles in journals and conference proceedings.

Teaching Activity

Teacher of Machinery Fluid Dynamics, Master's degree in Energetic Engineering

Selected Publications

C. De Bartolo, A. Nigro, V. Covello, F. Bassi, Assessment of a high-order discontinuous Galerkin method for internal flow problems. Part I: Benchmark results for quasi-1D, 2D waves propagation and axisymmetric turbulent flows, *Computers & Fluids* 134 (2016) 61-80.

S. M. Renda, R. Hartmann, C. De Bartolo, M. Wallraff, A high- order discontinuous Galerkin method for all- speed flows, *International Journal for Numerical Methods In Fluids* 77 (2015) 224-247.

A. Nigro, C. De Bartolo, F. Bassi, A. Ghidoni, Up to sixth-order accurate A-stable implicit schemes applied to the Discontinuous Galerkin discretized Navier- Stokes equations, *Journal of Computational Physics* 276 (2014) 136-162.

A. Nigro, S. Renda, C. De Bartolo, R. Hartmann, F. Bassi, A high-order accurate discontinuous Galerkin finite element method for laminar low Mach number flows, *International Journal for Numerical Methods In Fluids* 72/1 (2013) 43-68.

Research Lines

- 1) Design of numerical methods for compressible and incompressible flows;
- 2) Numerical and experimental analysis of complex flows in turbomachinery and internal combustion engine.
- 3) Computational magnetohydrodynamics;
- 4) Computational hemodynamics