Salvatore Lovecchio

Curriculum Vitae

Education

2012 -present **PhD Student**, *Environmental and Energy Engineering Sciences*, University of Udine, Udine, Italy.

Advisor: Prof. Alfredo Soldati.

Title Thesis: "Dynamics of passive and active particles at the surface of a stratified/unstratified turbulent open channel flow"

Research field: Numerical simulation of turbulent multiphase/multicomponet flows. Pubblications:

- S.Lovecchio, C.Marchioli, A.Soldati, "Time persistence of floating particle clusters in free-surface turbulence", Phys.Rev.E 88(2013): 033003;
- S.Lovecchio, F.Zonta, A.Soldati, "Influence of thermal stratification on the surfacing and clustering of floaters in free surface turbulence", Advances in Water Resources 72 (2014);
- S.Lovecchio, F.Zonta, A.Soldati, "Inverse energy cascade and flow topology in free surface turbulence", submitted (2014);
- **S.Lovecchio**, A.Soldati, "Plankton surfacing forbidden by thermal stratification", in preparation.
- 2009-2011 Master degree, Computational Physics, University of Udine, Udine, Italy, Grade:110/110 cum laude,

Advisor: Prof. Alfredo Soldati (University of Udine),

Co-advisor:Prof. Federico Toschi (University of Eindhoven),

Dott. Ing. Cristian Marchioli (University of Udine).

Title of thesis: "Direct numerical simulation of particle sedimentation and resuspension mechanisms in turbulent boundary layer"

- 2004-2009 **Bachelor degree, Physics**, *University of Bari, Bari, Italy*, Grade:106/110 , Advisor: Prof. Franz Navach. Title of thesis: "Recent developments in monolithic pixel Silicon detectors"
- 1999-2004 High School, Liceo Scientifico P.N.I. Sante Simone (National Plan of Informatics), Conversano, Bari, Italy, Grade:100/100.

via Antonio Ligabue, 5 – 70014 Conversano (BA), Italy ⁽¹⁾ (+39) 345 2683669 ⊠ lovecchio.salvo@gmail.com - salvatore.lovecchio@uniud.it ⁽²⁾ http://158.110.32.35/PEOPLE/Lovecchio.html

International experiences

Oct.2013-Jul 2014 **PhD Visitor**, *Institut de Mècanique des Fluides de Toulouse, Toulouse, France,* Advisor: Prof. Eric Climent.

National experiences

Mar 2009-May 2009 Internship at INFN, National Institute of Nuclear Physics, Bari, Italy, Title of project: "Tests for the characterization and choice of modules forming the silicon pixel detector of ALICE experiment at CERN".

Awards and Honours

- 29/01/2014 Best poster award, awarded by the University of Udine.
 - 2011 **HPC-Europa fellowship**, Faculty of Applied Physics, Department: Mesoscopic Transport Phenomena, Technishe Universiteit Eindhoven, Eindhoven, NL, Title of project: "Direct Numerical Simulation of particle sedimentation and resuspension mechanisms in turbulent boundary layer".

Languages

Italian	Mothertongue
English	Professional Level, B2
French	Basic

Conversationally fluent Basic knowledge

Technical skills and competences

- Team spirit, good communication
- Problem-solving attitude
- End-oriented work capacity

Good abilty in developing mathematical, physics and computational models to study real problems

Computer skills

Operative system and environments Windows, Linux

Programming languages

Basic C++, Java, Html, Matlab, Wolfram Mathematica

Advanced C, Fortran

General tools and package Gnuplot, LATEX, MS Office, OpenOffice, Beamer

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