

# GIOVANNI CORSI

## EXPERIENCE

<i>Sapienza Università di Roma - Dipartimento di Ingegneria Strutturale e Geotecnica</i>	2021–	POSTDOC	Research contract at Sapienza University of Rome, working on problems of Fluid-Structure Interaction, and on Phase-Field models for problems of fracture in thin structures. Theoretical and numerical work, using the OpenFOAM and FEniCS libraries. References: Professor Antonino FAVATA, Professor Stefano VIDOLI
<i>Scuola Internazionale Superiore di Studi Avanzati (SISSA)</i>	2014–2016	RESEARCH CONTRACT	Research contract at SISSA for Danieli SpA, an international company in the region. Tasks carried out included development of CFD tools for fluid-structure interaction problems and simulation of industrial flow problems. The numerical tools were developed within the OpenFOAM numerical library. References: Professor Gianluigi ROZZA

## EDUCATION

<i>PhD</i>	2016–2020	SISSA - Scuola Internazionale Superiore di Studi Avanzati	<i>cum laude</i> · <i>PhD in Mathematical Analysis, Modelling, and Applications</i> - Dottorato di ricerca in Analisi Matematica, Modelli e Applicazioni · Trieste, Italy Thesis: <i>Fluid structure interaction problems involving thin active shells and microswimmers</i> Advisor: Professor Antonio DE SIMONE
<i>M. Sc.</i>	2011–2014	Politecnico di Milano	110/110 · <i>Mechanical Engineering</i> - Laurea Magistrale in Ingegneria Meccanica · Milan, Italy Thesis: <i>Numerical Analysis of the unsteady flow in a turbine stage with non-uniform temperature field at inlet</i> Italian title: <i>Analisi numerica del flusso instazionario in uno stadio di turbina assiale in presenza di disuniformità nel campo di temperatura in ingresso.</i> Advisor: Professor Giacomo Bruno PERSICO
<i>B. Sc.</i>	2008–2011	Università degli studi di Udine	110/110 <i>cum laude</i> · <i>Mechanical Engineering</i> - Laurea Triennale in Ingegneria Meccanica · Udine, Italy

## EXPERIENCE ABROAD

<i>January-June 2018, and December 2019 - March 2020</i>		Sorbonne Université	Period of research carried over abroad in the <i>Institut Jean Le Rond d'Alembert</i> at Sorbonne Université · Paris, France Scientific Host: Professor Corrado MAURINI
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## SKILLS

<i>Programming Languages</i>	C, C++, PYTHON
<i>Numerical Libraries</i>	Extensive experience in using numerical libraries for simulation of problems in the context of continuum mechanics or fluid dynamics, in particular OPENFOAM (finite volumes), FENICS (finite elements)

*HPC skills*                      Used HPC resources on various supercomputers in France (Jean-Zay, MeSU) and Italy (CINECA and SISSA resources) with various architectures.

*HPC environments*                      PBS scheduler, SLURM scheduler

*Languages*                      ITALIAN · Mothertongue  
ENGLISH · Fluent

#### HPC RESOURCES ALLOCATIONS AS PRINCIPAL INVESTIGATOR

2020                      **Italian SuperComputing Resource Allocation (ISCRA, CINECA)**, *Application Class C*, Call of May 2020, Project ID - FSThin20.  
Accepted, hours requested: 200k

2021                      **Italian SuperComputing Resource Allocation (ISCRA, CINECA)**, *Application Class C*, Call of April 2021, Project ID - MCR-SW21.  
Accepted, hours requested: 60k

2021                      **Italian SuperComputing Resource Allocation (ISCRA, CINECA)**, *Application Class B*, Call of June 2021, Project ID - MT-SWS21.  
Accepted, hours requested: 2.4M

March 6, 2022

**Giovanni Corsi**