



Michele Battistoni

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EDUCATION AND TRAINING

Perugia, Italy
PH.D. IN MECHANICAL ENGINEERING University of Perugia

Address 06125, Perugia, Italy

Perugia, Italy
LAUREA DEGREE WITH HONORS IN MECHANICAL ENGINEERING University of Perugia

Address 06125, Perugia, Italy

WORK EXPERIENCE

2018 – CURRENT Perugia, Italy
ASSOCIATE PROFESSOR UNIVERSITY OF PERUGIA

Macchine a Fluido (Fluid Machines)

MAR 2019 – MAY 2019 Thuwal , Saudi Arabia
VISITING PROFESSOR KAUST (KING ABDULLAH UNIVERSITY OF SCIENCE AND TECHNOLOGY)

MAY 2018 – SEP 2018 Chicago, United States
VISITING SCIENTIST ARGONNE NATIONAL LABORATORY

2006 – 2018 Perugia, Italy
ASST. PROFESSOR UNIVERSITY OF PERUGIA

Macchine a Fluido (Fluid Machines)

MAY 2016 – SEP 2016 Chicago, United States
VISITING SCIENTIST ARGONNE NATIONAL LABORATORY

MAY 2012 – SEP 2014 Chicago, United States
VISITING SCIENTIST ARGONNE NATIONAL LABORATORY

1998 – 2001 Turin, Italy
DESIGN ENGINEER FCA (FORMER FIAT)

2000 – 2006 Perugia, Italy
RESEARCH ASSOCIATE UNIVERSITY OF PERUGIA

LANGUAGE SKILLS

Mother tongue(s): **ITALIAN**

Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
ENGLISH	C2	C2	C2	C2	C2

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

ADDITIONAL INFORMATION

HONOURS AND AWARDS

2020

Forest R. McFarland Award – SAE International, Society of Automotive Engineers for “his sustained outstanding contributions toward the work of the SAE Engineering Events in the planning, development, and dissemination of technical information through technical meetings, conferences, and professional development programs at SAE events”.

2014

SAE Excellence in Oral Presentation Award – SAE International for the presentation “*Effect of Off-Axis Needle Motion on Internal Nozzle and Near Exit Flow in a Multi-Hole Diesel Injector*,” *SAE Int. J. Fuels Lubr.* 7(1):167-182, 2014, at SAE World Congress, Detroit, MI (USA).

2010

SAE Excellence in Oral Presentation Award – SAE International for the presentation “*Evaluation of Diesel Spray Momentum Flux in Transient Flow Conditions*,” *SAE Paper 2010-01-2244*, at SAE Powertrains Fuels & Lubricants Meeting, San Diego, CA (USA).

RESEARCH AND PROFESSIONAL ACTIVITIES

Professional Membership

APS-DFD (American Physical Society – Division of Fluid Dynamics)
ASME (American Society of Mechanical Engineers)
ILASS (The Institute for Liquid Atomization and Spray Systems)
SAE (Society of Automotive Engineers)
ATI (Associazione Termotecnica Italiana)

Invited talks and Keynotes

2023 ECN9, Engine Combustion Network, 9th workshop, topic leader on ammonia as fuel, Naples, September, 2023
2022 ECN8, Engine Combustion Network, 8th workshop, topic leader, Detroit (USA), April, 2022
2020 Keynote at ILASS Asia 2020 Conference, Zhenjiang, China, Plenary Speaker, October 24th, 2020.
2020 ECN7, Engine Combustion Network, 7th workshop, topic leader, Detroit (USA), virtual event, June 10-25, 2020.
2019 Jiangsu University, Zhenjiang, China, hosted by Prof. Zhixia He, December 6th, 2019.
2019 Jiao Tong University, Shanghai, China, seminar, hosted by Prof. Xu Min, December 5th, 2019.
2019 Keynote at 2020 Fifth China Engine Technology Summit, Shanghai, China, 3-4th December 2019.
2019 Argonne National Laboratory 4th VERIFI workshop, Chicago, IL (USA), June 27-28, 2019.
2019 KAUST (Saudi Arabia), Mechanical Engineering Graduate Seminar, hosted by Prof. Hong Im, April 22nd, 2019.
2018 ECN6, Engine Combustion Network, 6th workshop, topic leader, Valencia (Spain), September 10th, 2018.
2018 Converge User Conference meeting - Europe, Bologna (Italy), March 20th, 2018.
2017 Argonne National Laboratory 3rd VERIFI workshop, Chicago, IL (USA), November 7-8, 2017.
2017 ECN5, Engine Combustion Network, 5th workshop, topic leader, Detroit, MI (USA), March 31st, 2017.
2017 Converge User Conference meeting - Europe, Vienna (Austria), March 9th, 2017.
2017 Converge User Conference meeting - Europe, Vienna (Austria), March 8th, 2017.
2016 KAUST, (Saudi Arabia), host Prof. Hong G. Im, March 18th, 2016.
2015 Argonne National Laboratory, Chicago, IL (USA), April 24th, 2015.
2014 IFPEN, Paris, Rueil-Malmaison (France), December 4-5, 2014.
2014 Sandia National Laboratories, Advanced Engine Combustion, Livermore, CA (USA), February 11th, 2014.
2012 Siemens, LMS Vehicle Conference, Munich (Germany), April 2012.

Organizer for conference sessions and events

2021 ICLASS Intl. Conf. on Liquid Atomization & Spray Systems – Scientific Committee, Edinburgh (UK).
2021 SAE WCX World Congress – Organizer for “Fuel Injection and Sprays” session, 2021, Detroit (USA).
2020 SAE 2020 International Powertrains, Fuels and Lubricants Meeting – Organizer, Krakow (Poland).
2020 Engine Combustion Network (ECN-7), Lead for “Primary atomization”, 2020, Detroit, virtual event.
2020 SAE WCX World Congress – Organizer for “Fuel Injection and Sprays” session, 2020, virtual event.
2019 SAE World Congress – Organizer for “Fuel Injection and Sprays” session, Detroit (USA).
2019 SAE ICE2019 – Organizer for “Fuel Injection and Sprays: Modeling” session, Capri (Italy).
2018 Engine Combustion Network (ECN-6), Lead for “Primary atomization”, Valencia (Spain).
2018 SAE WCX World Congress – Organizer for “Fuel Injection and Sprays” session, Detroit (USA).
2017 SAE WCX World Congress – Organizer for “Fuel Injection and Sprays” session, Detroit (USA).
2017 SAE ICE2017 – Organizer for “Fuel Injection and Sprays: Modeling” session, Capri (Italy).
2017 SAE 2017 International Powertrains, Fuels and Lubricants Meeting – Organizer, Beijing, (China).
2017 Engine Combustion Network (ECN-5) topic Leader for “Primary atomization”, Detroit (USA).
2016 SAE World Congress – Organizer and Chair for “Fuel Injection and Sprays” session, Detroit (USA).
2015 SAE ICE2015 – Organizer and Chair for “Fuel Injection and Sprays: Modeling” session, Capri (Italy).
2015 SAE World Congress – Organizer and Chair for “Fuel Injection and Sprays” session, Detroit (USA).
2014 SAE World Congress – Chair for “Fuel Injection and Sprays” session, Detroit (USA).
2006 “SAE The Sustainable Mobility Challenge” – Committee Member ATI Int. Conf., Perugia (Italy).

2006 61° Italian National Congress ATI – Co-Organizer and Committee Member, Perugia (Italy).

Funding from Competitive Calls

2023 - Australian Research Council - ARC Grant, as external-PI, 2023-26
2022 - KAUST Competitive Research Grant, as external-PI, sponsor KAUST (Saudi Arabia), 2022-25
2020 - PRIN 2020, Italian Research Ministry grant, as local-PI, 2022-25.
2018 - KAUST Competitive Research Grant, as external-PI, sponsor KAUST (Saudi Arabia), 2018-21
2017 - PRIN 2017, Italian Research Ministry grant (Italy), Collaborator, 2019-22
2016 - University of Perugia, 2015 Basic Research Grant
2012 - European project LIFE+, Collaborator, 2012-14.
2009 - PRIN 2009, Italian Research Ministry grant. Collaborator, 2011-13.
2007 - PRIN 2007, Italian Research Ministry grant. Collaborator, 2008-10.

Competitive Computational Resource Allocations

2018-21 KAUST Supercomputing Laboratory, over 10 M core-hours on Shaheen II, supercomputer.
2018-21 Cineca, SuperComputing Applications and Innovation, 2 M core-hours on Marconi supercomputer.
2017-18 Cineca, SuperComputing Applications and Innovation, Iscra-B allocation, 3 M core-hours on Marconi supercomputer.
2013-18 Argonne National Laboratory, United States, LCRC - Laboratory Computing Resource Center, 5 M core-hours.
2014-16 Cineca, SuperComputing Applications and Innovation, 4 M core-hours on Galileo, Fermi and Marconi supercomputers.

Private sponsors

Research projects with many industrial partners:

- Marelli Powertrain
- Marelli Exhaust Systems
- General Motors
- Lamborghini
- Solfer Componenti
- Piaggio & C
- Federal Mogul
- Loccioni
- Umbria Mobilità

Fellowships

KAUST (King Abdullah University of Science and Technology), Saudi Arabia Fellowship as Visiting Professor, April-May 2019.

Argonne National Laboratory, USA. In 2018. Fellowship for four months as visiting scientist.

Argonne National Laboratory, USA. In 2016. Fellowship for four months as visiting scientist.

Argonne National Laboratory, USA. From 2012 to 2014. Fellowship for two-year as visiting scientist.

PROJECT EVALUATOR:

- Italy:
 - PRIN 2012, PRIN 2015, PRIN 2017
- EU, ERC projects:
 - ERC-2020-ADG, MULTILFOWS project; ERC-2022-ADG AIRDROP project

TEACHING ACTIVITY

Doctoral Committee Member

- Committee member within doctoral program in Industrial Engineering, Univ. Perugia, Italy, 2017–present
- Committee member within doctoral program in Energy and Sustainability Engineering, Univ. Perugia, Italy, 2008–2012
- External committee member and reviewer for several PhD students graduating at
 - IFPEN (France),
 - CMT (Spain),
 - Zagreb University (Croatia),
 - Tasmania University (Australia),
 - Politecnico Milano (Italy),
 - University of Bologna (Italy)

Courses

“Multiphase Flows”, Lecturer, doctoral level, 2020-present
“Computational Fluid Dynamics”, Lecturer, graduate level, 2015–present
“Fluid Machines” Lecturer, undergraduate level, 2015–present
“Turbomachines” Lecturer, undergraduate level, 2017–18

"Internal Combustion Engines" guest lecturer, graduate (Prof. C. Grimaldi)	2004–present
"Thermodynamics and Energy Systems", Lecturer, undergraduate level,	2014–15
"Renewable Energy Systems", Lecturer, graduate level	2011–12
"Advanced Energy Conversion Systems", Lecturer, graduate level	2006–11
"Fluid Machinery" guest lecturer, (Prof. Bidini, Prof. Grimaldi), graduate level	2002–04, 05, 08

Students Advised

Advisor of approximately 60 graduate students for their Master Thesis and 6 PhD students.

List of some recently advised students

- Nasrin S. Fard, PhD student, to graduate 2023/24
- Faniry N.Z. Rahantamialisoa, PhD student, graduated 2022 - currently post-doc
- Zemi Jacopo, PhD student, graduated 2021 – currently Researcher at UniPG
- Cruccolini Valentino (PhD), graduated 2020 – currently at Iveco
- Lorenzo Gasbarro (MS), graduated in 2019 – currently at Loccioni
- Luca Ambrogi (MS), graduated in 2019 – currently at Loccioni
- Cimarello Alessandro (PhD), graduated 2018 – currently at Wartsila
- Risi Francesco (PhD), graduated April 2017 – currently at Eles Semiconductor Equipment
- Maria Pia Centini (MS), graduated in 2018 – currently at General Motors - Punch
- Iolanda Stocchi (MS), graduated in 2018 – currently at General Electric
- Pini Marco (MS), graduated in 2017 – currently at General Motors - Punch
- De Franciscis Michele (MS), graduated April 2017 – currently at Terex
- Battimazza Alessio (MS), graduated April 2016 – currently at Fiat Chrysler Automobiles
- Battista Federico (MS), graduated April 2016 – currently at Philip Morris International
- Poggiani Claudio (PhD), graduated January 2016 – currently at Faurecia
- Onorati Andrea (MS), graduated April 2015 – currently at Philip Morris International
- Langarelli Sellani Federico (MS), graduated in 2012 – currently at Porsche
- Pascolini Enrico (MS), graduated in 2009 – currently at Ferrari
- Tabarrini Simone (MS), graduated in 2009 – currently at Ferrari
- Listori Marco (MS), graduated in 2009 – currently at General Electric
- Monaldi Michelangelo (MS), graduated in 2007 – currently at Rolls Royce

PUBLICATIONS

Citation report h-index citations

Scopus:	28	1917
Google Scholar:	30	2578

Publications

I have (co)authored 140+ scientific papers, 50+ of which published in international journals with referees, 40+ presented at international congresses with referees, 2 book chapters, and the remaining presented at international or national conferences or symposia.

Full list of publications is available here:

Scopus:

<https://www2.scopus.com/authid/detail.uri?authorId=36093861700>

Google Scholar

<https://scholar.google.it/citations?user=yVL2RyoAAAAJ&hl=en&oi=ao>

November 2023

Michèle Battista