



Michele
Battistoni

CONTATTI

[Redacted]

[Redacted]

[Redacted]

[Redacted] michele.battistoni@unipg.it

[Redacted]

ISTRUZIONE E FORMAZIONE

2004 - Perugia, Italia

Ph.D. in Ingegneria Meccanica

Università degli Studi di Perugia

1999 - Perugia, Italia

Laurea in Ingegneria Meccanica, quinquennale, 110 e Lode

Università degli Studi di Perugia

ESPERIENZA LAVORATIVA

2018 - ATTUALE - Perugia, Italia

Professore Associato

Università degli Studi di Perugia

Ingegneria Meccanica - Settore scientifico: Macchine a Fluido

APR 2019 - MAG 2019 - Thuwal , Arabia Saudita

Visiting Professor

KAUST (King Abdullah University of Science and Technology)

GIU 2018 - SET 2018 - Chicago, Stati Uniti

Visiting Scientist

Argonne National Laboratory

2006 - 2018 - Perugia, Italia

Ricercatore Universitario

Università degli Studi di Perugia

Ingegneria Meccanica - Settore scientifico: Macchine a Fluido

GIU 2016 - SET 2016 - Chicago, Stati Uniti

Visiting Scientist

Argonne National Laboratory

GIU 2012 - SET 2014 - Chicago, Stati Uniti

Visiting Scientist

Argonne National Laboratory

2001 - 2006 - Perugia, Italia

Assegnista di Ricerca

Università degli Studi di Perugia

Ingegneria Meccanica - Settore scientifico: Macchine a Fluido

1999 - 2001 - Torino, Italia

Ingegnere Progettista

FCA (ex Fiat Auto)

Progettazione componenti motore

COMPETENZE LINGUISTICHE

LINGUA MADRE: italiano

ALTRE LINGUE:

inglese

Ascolto C2	Lettura C2	Produzione orale C2	Interazione orale C2	Scrittura C2
----------------------	----------------------	-----------------------------------	------------------------------------	------------------------

COMPETENZE DIGITALI

Engineering software (CFD, FEM, CAD) / Padronanza del Pacchetto Office (Word Excel PowerPoint ecc) / Programming Languages: C, C++, Python, Matlab / Operating Systems (Windows, Linux) / Scripting base bash, python e powershell / computational fluid dynamics (expert) / High Performance Computing

ONORIFICENZE E RICONOSCIMENTI

2020

Forest R. McFarland Award – SAE International, Society of Automotive Engineers

per "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 per la presentazione "*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 per la presentazione "*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).

ATTIVITÀ PROFESSIONALI E DI RICERCA

Membership Professionali

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)

Seminari su invito e Keynotes

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.

Organizzatore per conferenze, sessioni ed eventi

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).

Fondi ottenuti da bandi competitivi

KAUST Competitive Research Grant, as external-PI, sponsor KAUST, 2018-21

University of Perugia, 2015 Basic Research Grant

European project LIFE+ 2012-14, Co-PI.

PRIN 2009, Italian Research Ministry grant. Collaborator, from 2011 to 2013, Co-PI.

PRIN 2007, Italian Research Ministry grant. Collaborator, from 2008 to 2010, Co-PI.

Allocazioni di risorse di calcolo da bandi competitivi

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, Iskra-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.

Sponsors di ricerca privati

Progetti di ricerca con molteplici aziende partners:

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

Fellowships per studio/ricerca e scambio all'estero

Argonne National Laboratory, USA. In 2018. Fellowship di 4 mesi come visiting scientist.

Argonne National Laboratory, USA. In 2016. Fellowship di 4 mesi come as visiting scientist.

Argonne National Laboratory, USA. From 2012 to 2014. Fellowship di 2 anni come visiting scientist.

ATTIVITÀ DIDATTICA

Membro di Collegio di Dottorato (Università degli Studi di Perugia)

- dottorato in Ingegneria Industriale, 2017–oggi
- dottorato in Energy and Sustainability Engineering, 2008–2012

Docente di Corsi Universitari

- “Multiphase Flows”, Docente di ruolo, livello dottorato, 2020–oggi
- “Fluidodinamica delle Macchine - CFD”, Docente di ruolo, livello magistrale, 2015–oggi
- “Macchine a Fluido”, Docente di ruolo, livello triennale, 2015–oggi
- “Turbomacchine”, Docente di ruolo, livello magistrale, 2017–18
- “Motori a Combustione Interna”, assistente, livello magistrale, (Prof. C. Grimaldi) 2004–oggi
- “Termodinamica e Sistemi Energetici”, Docente di ruolo, livello magistrale, 2014–15
- “Energie Rinnovabili”, Docente di ruolo, livello magistrale 2011–12
- “Materiali per Sistemi Energetici Innovativi”, Docente di ruolo, livello magistrale 2006–11
- “Macchine a Fluido”, assistente, livello magistrale, (Prof. Bidini, Prof. Grimaldi), 2002–04, 05, 08

Relatore di Tesi Magistrali e di Dottorato

Relatore di 50+ studenti per le loro tesi magistrali e di 6 studenti di dottorato.

Lista di alcuni più recenti

- Nasrin S. Fard, PhD student, to graduate 2023
- Faniry N.Z. Rahantamialisoa, PhD student, to graduate 2022
- Zembi Jacopo, PhD student, to graduate 2021
- Cruccolini Valentino (PhD), graduated 2020 – currently post-doc
- 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 Francis 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

PUBBLICAZIONI

● Report citazionale: h-index, citazioni

Scopus:	22	1321
Google Scholar:	24	1771

● Pubblicazioni

Autore di 100+ articoli scientifici, 40+ dei quali pubblicati su journals internazionali con revisione tra pari, 40+ presentati a congressi internazionali con revisione tra pari, 2 capitoli di libro ed il resto a congressi internazionali o nazionali.

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

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