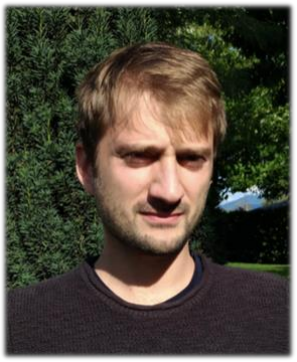
CURRICULUM VITAE

Giulio Gori, PhD

Full-time Researcher in Fluid Dynamics (Untenured),
Department of Aerospace Science and Technology, Politecnico di Milano.
Via La Masa, 34, 20156, Milano, Italy.

Email: giulio.gori@polimi.it
Mobile: +39 333 9308997
Department web page: https://www.aero.polimi.it
Personal web page: https://www.giuliogori-research.com/



EDUCATION

28/1/2019 Ph.D. in Aerospace Engineering
Thesis: *Non-Ideal Compressible Fluid-Dynamics: Developing a Combined Perspective on Modeling, Numerics and Experiments*. Department of Aerospace Science and Technology, Politecnico di Milano, Italy. Advisor: Prof. Alberto Matteo Attilio Guardone

22/7/2013 Master Degree in Aeronautical Engineering
Thesis: *PoliMIce: un ambiente di simulazione per la previsione dell'accrescimento di ghiaccio su velivoli*. Department of Aerospace Science and Technology, Politecnico di Milano, Italy. Advisor: Prof. Alberto Matteo Attilio Guardone

22/9/2010 Bachelor's Degree in Aerospace Engineering
Department of Aerospace Science and Technology, Politecnico di Milano, Italy

CURRENT AND PREVIOUS POSITIONS

04/10/2021 – Current
Full-time Researcher in Fluid Dynamics (Untenured), Department of Aerospace Science and Technology, Politecnico di Milano, Italy. UN-BIASED HORIZON-MSCA-PF-01

15/01/2021 – 03/10/2021
Post-doc researcher, CS2 H2020 MONNALISA Project, Department of Aerospace Science and Technology, Politecnico di Milano, Italy

02/10/2017 – 31/12/2020
UTOPIAE MSCA-ITN ESR, Platon Team, INRIA/CMAP, École Polytechnique, France

16/06/2014 – 15/07/2017
Research fellow, CREALab/Department of Aerospace Science and Technology, Politecnico di Milano, Italy

QUALIFICATIONS

03/02/2022 – 03/02/2031
National Scientific qualification as associate in the Italian higher education system, in the call 2021/2023 (Ministerial Decree n. 553/2021 and 589/2021) for the disciplinary field of 09/A1 - Aeronautical and aerospace engineering and naval architecture.

2014 (2nd session) – Not expiring
State Professional Examination for the qualification as Industrial Engineer – Section A.

MOBILITY

2019 Von Karman Institute for Fluid Dynamics, Belgium (4 mths). Uncertainty Quantification for hypersonic flows and heat shield ablation for atmospheric entry applications.

2018 Center for Turbulence Research at Stanford University (1.5 mths), Palo Alto, CA, USA. Development of robust optimization approaches for Organic Rankine Cycle applications.

2016 UT Twente, Faculty of Engineering Technology, Enschede, Netherlands (3 mths). Developing numerical methods for sliding mesh interfaces in computational fluid dynamics.

2014 Aerospace Design Lab (ADL) at Stanford University (1 mth), Palo Alto, CA, USA. Development and implementation of the SU2 non-ideal compressible-fluid dynamics solver.

MAJOR INTERNATIONAL COLLABORATIONS

Prof. A. Guardone Full professor, Dept Aerospace Science & Technology, Politecnico di Milano Italy Collaboration on non-ideal compressible fluid dynamics and in-flight icing

Prof. P. Colonna Full professor, Chair of Propulsion and Power at TU Delft, Netherlands Collaboration on non-ideal compressible fluid dynamics

Prof. J.J. Alonso Full professor in Aeronautics & Astronautics at Stanford University, CA, USA Collaboration on computational fluid dynamics and software development

Prof. G. Iaccarino Full professor in Mechanical Engineering at Stanford University, CA, USA Collaboration on uncertainty quantification and robust optimization

Prof. T. Magin Professor, Aeronautics and Aerospace Department, Von Karman Institute, Belgium. Collaboration on aerothermodynamics of space capsule and atmospheric entry

Prof. P. Congedo Head of Platon Team CMAP/INRIA, École Polytechnique, France Collaboration on uncertainty quantification and robust optimization

Prof. O. Le Maître Research Director, Platon Team CNRS/CMAP/INRIA, École Polytechnique, France Collaboration on uncertainty quantification and robust optimization

Prof. M. Panesi Director of the Center for Hypersonics and Entry Systems Studies (CHESS), University of Illinois at Urbana-Champaign, USA, Collaboration on hypersonics

AWARDED FELLOWSHIPS

2022 Post-doctoral Fellowship HORIZON-MSCA-PF-01, UN-BIASED "UNcertainty quantification and modelling Bias Inhibition by means of an Agnostic Synergistic Exploitation of multi-fidelity Data", Department of Aerospace Science and Technology, Politecnico di Milano, Italy

2021 Temporary Research Fellowship for Research Activities UOR DAER "Development of simplified models for the aerodynamics of wings at high angle of attack" CS2-H2020 MONNALISA/Department of Aerospace Science and Technology, Politecnico di Milano, Italy

2017 – 2020 Early-Stage Researcher Fellowship, H2020-MSCA-ITN-2016, UTOPIAE-ESR3 "Inference and Design of Experiments in Large Scale Flow Problems", INRIA/Centre de Mathématiquées Appliqueé, École Polytechnique, IPP, France

2015 – 2017 Temporary Research Fellowship for Research Activities UOR DAER "Metodi numerici per la simulazione di correnti di fluidi comprimibili non-ideali" CREALab/Department of Aerospace Science and Technology, Politecnico di Milano, Italy

2014 – 2015 Temporary Research Fellowship for Research Activities UOR DAER "Simulazione numerica di correnti di gas densi con codici fluidodinamici per griglie chimera" CREALab/Department of Aerospace Science and Technology, Politecnico di Milano, Italy

FUNDINGS RECEIVED

2023 PRIN22-HERMES (173 k€)
2022 HORIZON-MSCA-PF-01 UN-BIASED (173 k€)
2018 CTR Sumer Program at Stanford University (3,550 $).

PUBLICATION RECORD

More than 30 scientific contributions in a time frame of about 7 years: 13 are peer-reviewed Journals articles, the remaining are peer-reviewed and non-peer-reviewed conference proceedings, and 3 chapters in book. According to Google Scholar, my current H-index is 12 with 450+ citations since 2014 and +400 since 2018.
Publications cover a wide range of topics.

Peer Reviewed Journals

- 2023 M. Gallia et al., J Aircr, https://doi.org/10.2514/1.C037223
- 2023 P. Yan et al., J Comput Appl Math, https://doi.org/10.1016/j.cam.2023.115169
- 2022 **G. Gori** et al., Comput Fluids, https://doi.org/10.1016/j.compfluid.2022.105614
- 2021 **G. Gori** et al., J Aircr, https://doi.org/10.2514/1.C036545
- 2021 **G. Gori** et al., Comput Fluids, https://doi.org/10.1016/j.compfluid.2021.105081
- 2020 **G. Gori** et al., Comput Fluids, https://doi.org/10.1016/j.compfluid.2020.104550
- 2020 N.Razaaly, G.Persico, **G.Gori,** P.M.Congedo, Appl Math Model, https://doi.org/10.1016/j.apm.2020.01.048
- 2020 **G. Gori** et al, Eur J Mech B https://doi.org/10.1016/j.euromechflu.2019.08.014
- 2018 **G. Gori**, A. Guardone, Appl. Math. Comput., https://doi.org/10.1016/j.amc.2017.07.041
- 2018 D. Vimercati, **G. Gori**, A. Guardone, J Fluid Mech, https://doi.org/10.1017/jfm.2018.328
- 2018 **G. Gori,** et al., J Aircr, https://doi.org/10.2514/1.C034412
- 2017 M. Zocca, **G. Gori** and A. Guardone, J Aircr, https://doi.org/10.2514/1.C033750
- 2015 **G. Gori** et al., Appl Math Comput, https://doi.org/10.1016/j.amc.2015.05.081

Chapter in Books

- 2023 **G. Gori** et al., Springer, Cham., https://doi.org/10.1007/978-3-030-64725-4_31-1
- 2023 M. Gallia et al., Springer, Cham., https://doi.org/10.1007/978-3-030-64725-4_37-1
- 2021 J. Reis et al., Springer, Cham., https://doi.org/10.1007/978-3-030-60166-9_1

Peer-Reviewed Conference Proceedings

- 2022 **G. Gori**, Spring Cham., https://doi.org/10.1007/978-3-031-30936-6_8
- 2020 **G. Gori** et al., https://doi.org/10.1007/978-3-030-80542-5_25
- 2019 **G. Gori** et al., ORC2019, Athens, Greece
- 2019 N. Razaaly et al., GPPS2019 Conference, Zurich, Switzerland
- 2018 N. Razaaly et al., CTR Summer Program, Stanford University, USA
- 2017 **G. Gori** et al., *Energy Procedia*, https://doi.org/10.1016/j.egypro.2017.09.151
- 2017 D. Vimercati et al., *Energy Procedia*, https://doi.org/10.1016/j.egypro.2017.09.231
- 2017 P. Molesini et al. *Energy Procedia*, https://doi.org/10.1016/j.egypro.2017.09.152
- 2017 M. Pini et al., *J. Phys.: Conf. Ser.* https://iopscience.iop.org/article/10.1088/1742-6596/821/1/012013
- 2017 **G. Gori** et al., *J. Phys.: Conf. Ser.* https://iopscience.iop.org/article/10.1088/1742-6596/821/1/012005
- 2017 **G. Gori** et al., *J. Phys.: Conf. Ser.* https://iopscience.iop.org/article/10.1088/1742-6596/821/1/012003
- 2015 **G. Gori** et al., ASME ORC2015, Brussels, Belgium

Conference Proceedings

- 2023 **G. Gori** et al, *AIAA AVIATION 2023 Forum*. San Diego (USA) https://doi.org/10.2514/6.2023-4422
- 2023 F. Caccia et al, *AIAA AVIATION 2023 Forum*. San Diego (USA) https://doi.org/10.2514/6.2023-3221
- 2022 **G. Gori** et al., *AIAA AVIATION 2022 Forum*. Chicago (USA) https://doi.org/10.2514/6.2022-3532
- 2022 A. Rausa et al., *AIAA AVIATION 2022 Forum*. Chicago (USA) https://doi.org/10.2514/6.2022-3902.
- 2022 F. Auteri et al., *AIAA AVIATION 2022 Forum*. Chicago (USA) https://doi.org/10.2514/6.2022-4149
- 2021 **G. Gori** and A. Guardone, *XXVI AIDAA Congress*, Pisa, Italy.
- 2021 **G. Gori**, A. Guardone. *AIAA AVIATION 2021 Forum*. (Virtual event) https://doi.org/10.2514/6.2021-2683
- 2021 T. Bellosta et al., *AIAA AVIATION 2021 Forum.* (Virtual event) https://doi.org/10.2514/6.2021-2645
- 2019 **G. Gori** et al., *FAR2019*, Monopoli (BA), Italy.
- 2019 B. Arizmendi et al., *AIAA AVIATION 2019 Forum.* Dallas (USA) https://doi.org/10.2514/6.2019-3464

- 2018 **G. Gori** et al., ISSW31, Nagoya (JPN). https://doi.org/10.1007/978-3-319-91017-8_93
- 2018 M. Zocca et al., *ECFD7*, Glasgow, United Kingdom.
- 2018 N. Razaaly et al., *ECFD7*, Glasgow, United Kingdom.
- 2015 S. Vitale et al., *AIAA AVIATION 2015 Forum*, Dallas (USA) https://doi.org/10.2514/6.2015-2760
- 2015 **G. Gori** et al., *AIAA AVIATION 2015 Forum*, Dallas (USA) https://doi.org/10.2514/6.2015-3019

INSTITUTIONAL RESPONSABILITIES

At the Department of Aerospace Science & Technology, Politecnico di Milano, Italy:

2023 – Adjunct member PhD School Committee
2022 – Member of the Communication and Event Organization Group, social media manager
2022 – Member of the Master of Science Graduation Committee (Examination Board Member)
2022 – Coordinator of the Special Interest Group for Machine Learning in Aerospace Applications
2014 – 2017 Coordinator of the SU2 open-source CFD solver User Group

TEACHING ACTIVITY

At the Department of Aerospace Science & Technology, Politecnico di Milano, Italy:

2023 – Professor – "Fundamentals of Hypersonic Flows" (Full responsibility of lectures and exams)
2022 – 2022 Assistant – "Fundamentals of Hypersonic Flows" (Students' project tutoring)
2021 – 2022 Assistant – "Compressible Fluid Dynamics" (Exercise sessions and numerical labs)
2021 – 2022 Assistant – "Computational Fluid Dynamics" (Students' project tutoring)

SUPERVISING ACTIVITY

2023 – Supervisor of 2 Research Fellows (HERMES Project)
2023 – PhD co-supervisor TRACES-ESR9
2014 – Supervisor/co-supervisor of +20 (including ongoing) MSc students developing the thesis

ORGANIZATION OF SCIENTIFIC MEETINGS

2023 Chair of the Local Organizing Committee, 4th SU2 Conference, Varenna, Italy
2022 Organizer of symposium "*Numerical Simulation of Ice Accretion",* ESCO2022, Plizen, CZ
2019 Member of Organizing Committee (Local Organizer), *UQOP2019,* Paris, France
2017 Staff member, *4th International Seminar on ORC Power Systems*, Milano, Italy
2016 Staff member, *NICFD-PP 2016*, Varenna, Italy

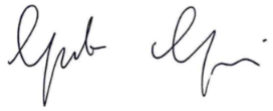
MEMBERSHIP OF SCIENTIFIC SOCIETIES, VOLUNTEERING, AND REVIEWING ACTIVITIES

2023 Team Member GARTEUR - Action Group RC/AG-26 - Noise Radiation and Propagation for Multirotor System Configurations
2021 – 2022 Member of the Italian Association for Aeronautics and Astronautics (AIDAA)
2015 – Scholarly peer reviewer: Journal of Computational Physics, Physics of Fluids, Mathematics and Computers in Simulations, Applied Mathematics & Computation
2014 – Volunteer Member of the SU2 Principal Developers Team

SOFTWARE DEVELOPMENT

- PoliMIce Core developer member of the integrated CFD-multiphase PoliMIce software (2012-2017).
- SU2 Member of the Principal Developers team of the SU2 open-source CFD solver (since 2014).
- PoliUQ An in-house Python library for Uncertainty Quantification and robust optimization.

Milano,
August 21st, 2023



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