PERSONAL INFORMATION

Family name, First name: Avallone Francesco
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- **EDUCATION**

2015	PhD Dipartimento di Ingegneria Aerospaziale, Università degli Studi di Napoli Federico II, Italy Prof. Gennaro Cardone
2011	MSc in Aerospace Engineering (Laurea Specialistica in Ingegneria Aerospaziale) Dipartimento di Ingegneria Aerospaziale, Università degli Studi di Napoli Federico II, Italy
2009	BSc in Aerospace Engineering (Laurea Triennale in Ingegneria Aerospaziale) Dipartimento di Ingegneria Aerospaziale, Università degli Studi di Napoli Federico II, Italy

- **CURRENT POSITION(S)**

2023 – Present	Full Professor Department of Mechanical and Aerospace Engineering (DIMEAS), Politecnico di Torino, Italy
2023 – Present	Guest Researchers Faculty of Aerospace Engineering, FPT Dept., Delft University of Technology, The Netherlands
2022 – Present	Co-founder at MuTech Delft, The Netherlands.

- **PREVIOUS POSITIONS**

2022 – 2023	Assistant Professor – RTDb Department of Mechanical and Aerospace Engineering (DIMEAS), Politecnico di Torino, Italy
2017 – 2022	Assistant Professor – Tenured Faculty of Aerospace Engineering, FPT Dept., Delft University of Technology, The Netherlands
2015 – 2017	PostDoc Faculty of Aerospace Engineering, AWEP Dept., Delft University of Technology, The Netherlands

- **SUPERVISION OF GRADUATE STUDENTS AND POSTDOCTORAL FELLOWS**

2017 – Present	3 PostDoc 5 graduated PhD as co-promotor

Co-promotor of 12 PhD candidate

Supervisor of >15 MSc students

at Faculty of Aerospace Engineering, FPT Dept., Delft University of Technology, The Netherlands and DIMEAS, Politecnico di Torino, Italy

- **TEACHING ACTIVITIES**

2023 – Present Responsible Instructor – Aerodinamica, BSc course, Politecnico di Torino, Italy

2022 – 2023 Co-Instructor – Aerodinamica Instazionaria ed Aeroelasticità, MSc course, Politecnico di Torino, Italy

2018 – 2022 Co-Instructor – Fundamentals of Aeroacoustics, MSc course, Delft University of Technology, The Netherlands

2019 – 2022 Co-Instructor – Basics of Aeroacoustics for Wind Energy, BSc course, Delft University of Technology, The Netherlands

2012 – 2015 Teaching Assistant – Gasdinamica, MSc course, Università degli Studi di Napoli Federico II, Italy

- **INVITED TALKS**

2024 Invited Speaker Webinar for the UK Acoustics Network. Flow-acoustic interaction over an acoustic liner: a physical description. January 31st, online.

2023 Keynote speaker - Post-processing methods to extract the acoustic-induced velocity within the orifice of a conventional acoustic liners grazed by a turbulent flow and acoustic wave. CFC2023, 25-28 April, Cannes, France.

2022 (Aero)Acoustics Challenges in Future Smart Cities. 29 August 2022. 12th Ibero-American Acoustic Conference. Florianapolis, Brazil.

2019 Numerical investigation of noise sources and noise mitigation strategies for Ultra High Bypass Ratio engines, 4 November 2019, National Institute of Aerospace Computational Fluid Dynamics Seminar, Hampton, Virginia, USA https://www.nianet.org/seminars/noise-sources-mitigation-strategies-ultra-high-bypass-ratio-engines/

2017 Rotor/stator interaction noise mitigation with wavy leading edge, 5-6 October 2017, ERCOFTAC Autumn Festival, Delft, The Netherlands https://www.ercoftac.org/events/ercoftac_autumn_festival_and_da_vinci_cometition_5th_6th_october_2017/

- **ORGANISATION OF SCIENTIFIC MEETINGS**

2023 Feri Farassat Memorial Symposium, Capri, Italy, Organizing Committee

2022 Workshop on metamaterials, Napoli, Organizing Committee

2022 DICUAM 2022, Delft (The Netherlands) and online, Organizing Committee

2021 Workshop on high-fidelity simulations for acoustic liner, online, Principal Organizer

2021 DICUAM 2021, online conference, Organizing Committee

2020 Noise Reduction Technologies with Meta-materials, Leiden, The Netherlands, Scientific Organizer

2018 Leader of the Category IX – BANC series of workshop

- **INSTITUTIONAL RESPONSIBILITIES**

2023 – Present Member Giunta DIMEAS Dept., Politecnico di Torino, Italy

2021 – 2022 Profile Leader, EWEM and WE MSc track, Delft University of Technology, The Netherlands

2020 – 2022 Coordinator of the Department HPC users, Delft University of Technology, The Netherlands

- **REVIEWING ACTIVITIES**

2023 Expert Evaluator National Science Center Polland

2022 Expert Evaluator NWO van Gogh call

2020 Expert evaluator for Clean Sky 2, Joint Undertaking

2018 – Present Editorial Board for Wind Energy, Wiley

2017 – Present Reviewer for the main scientific journals in the field (JFM, JSV, PoF, AIAA J, Wind Energy, Renewable Energy, Applied Acoustics, …)

2017 Expert evaluator for ANR (French National Research Agency)

- **MEMBERSHIPS OF SCIENTIFIC SOCIETIES**

2022 2023 Board Member of the Delft Young Academy

2012 – Present AIAA Member

2023– Present Fellow of European Young Academy

- **NATIONAL AND INTERNATIONAL PROJECTS**

2023 – Co-applicant of the NWO – OTP project AMPERE (consortium agreement to be signed).

2023 – PI of the ERASMUS MA2 project (grant agreement 101128001).

2022 – PI of the project ERC Starting Grant – LINING (grant Agreement 101075903).

2022 – Principal applicant for TU Delft of the Clean Aviation granted proposal HERWINGT. Invited to participate to the hearing session. WP Level 2 leader.

2022 – Holi-DOCTOR (NWO, grant number KICH1.ED02.20.004)

2022 – Co-PI of the project SE2A project. Physics of broadband noise of sound sources from installed propulsors. Granted and grant agreement under signature.

2021 – 2023 PI of the project OAI-AARCD-22671 supported by Aeroacoustics Research Consortium (AARC) (https://oai.org/aeroacoustics/).

2021 – X-ROTOR (X-shaped Radical Offshore wind Turbine for Overall cost of energy Reduction, grant number 101007135).

2020 – 2021 PI of the project OAI-AARCD-20159 supported by Aeroacoustics Research Consortium (AARC) (https://oai.org/aeroacoustics/)

2020 – INVENTOR (INnoVative dEsign of iNstalled airframe componenTs for aircraft nOise Reduction, grant number 860538).

2020 – SMART ROTOR European Regional Development Found (EFRO, grant number SA.59824 (2020/X)).

2020 – ENODISE (Enabling Optimized Disruptive Airframe-Propulsion integration concepts, grant number 860103).

2019 – 2023 ETN - Zephyr (Towards a more efficient exploitation of on-shore and urban wind energy resources, grant number 860101).

2019 – 2023 FUTPRINT50 (Future propulsion and integration: towards a hybrid-electric 50-seat regional aircraft, grant number 875551).

2018 – 2022 THAMES (Towards High-Reynolds Airfoil self-noise MEasurementS) project, grant number 15215).

2017 – 2021 Co-PI of the project IPERMAN (Innovative Permeable Material for Noise Reduction in Aircraft and Wind Turbine, grant number NWO 15452).

2017 – 2020 ETN – SMART ANSWER (Smart mitigation of flow-induced acoustic radiation and transmission for reduced aircraft, surface transport, workplaces and wind energy noise, grant number 722401).

- **FELLOWSHIPS AND AWARDS**

2012 – 2015 Scholarship for PhD, Dipartimento di Ingegneria Aerospaziale, Università degli Studi di Napoli Federico II, Italy

2014 Scholarship "Star Linea 2" selected project: "Hyper-TOMO" to perform research abroad, Universita' degli Studi di Napoli Federico II, Italy

- **PATENTS**

2022 – Luesutthiviboon, S., Rego, L., Ragni, D., Avallone, F., Snellen, M., van der Zwaag, S. & Casalino, D., 2020, IPC No. B64D, B64C, Priority date 31 Mar 2022, Priority No. WO 2022/066001

2020 – Ragni, D., van der Zwaag, S., Avallone, F., Rubio Carpio, A. & Snellen, M., 2021, IPC No. F03D, Priority date 15 Jun 2020, Priority No. WO 2021/256920

2020 – Hedayati, R., Casalino, D., Ragni, D., van der Zwaag, S. & Avallone, F., 2020, IPC No. B32B, F02K, G10K, F02C, Priority date 1 Nov 2018, Priority No. NL 2021916

- **ADDITIONAL ACTIVITIES**
  - 2021 – Co-founder Mutech developer of the product Muteskin (www.muteskin.eu)