

Salvatore Ivan Trapasso

✉ Contact information

Current pos. Assistant professor (RTD-B) of mathematical analysis

Current workplace Dipartimento di Scienze Matematiche "G. L. Lagrange" (DISMA)
Politecnico di Torino — Corso Duca degli Abruzzi 24, 10129 Torino (TO), Italy

Affiliations [Analysis and Quantum Theory Group](#) (DISMA) — [SmartData@PoliTO](#) (interdept. hub).

Email salvatoreivan.trapasso@polito.it • ivan@trapasso.info

Web www.trapasso.info

Identifiers  [Google Scholar: G13EzUsAAAAJ&](#)  [MathSciNet: 1290762](#)
 [ORCID: 0000-0003-1707-8966](#)  [Web of Science: AAA-6404-2022](#)
 [Scopus: 57204145748](#)  [ZbMATH: trapasso.s-ivan](#)

Profiles  [arXiv](#) •  [MathGenealogy](#) •  [ResearchGate](#) •  [PoliTO staff page](#)

🧩 Research areas

Harmonic analysis in phase space • Mathematical quantum theory • Applied harmonic analysis.

🏛 Former positions

2022–2025 **Junior assistant professor (RTD-A)**,
Department of Mathematics "G. L. Lagrange" (DISMA), Politecnico di Torino

2020–2022 **Postdoctoral research fellow (assegno di ricerca)**,
[Machine Learning Genoa Center \(MaLGa\)](#) & DIMA, Università degli Studi di Genova

🎓 Education

2017–2020 **Ph.D. in Pure and Applied Mathematics**, *Università & Politecnico di Torino*

2015–2017 **M.Sc. in Mathematics**, *Università degli Studi di Torino*

2012–2015 **B.Sc. in Physics**, *Università degli Studi di Torino*
Student at the University of Pisa in 2012–2014.

🏆 Awards and distinctions

2023 **Abilitazione Scientifica Nazionale (II fascia — SSD: MAT/05)**

 2023 **Axioms 2022 Young Investigator Award**

2022 **Qualification aux fonctions de Maître de Conférences (Sections 25–26)**, *CNU (France)*

2020 **Premio di Qualità 2019** for Ph.D. students, *Politecnico di Torino*

 2020 **Best Paper Award**, *International Conference on Generalized Functions* (Ghent)

2017 **Special distinction ("menzione di merito")**, *Università degli Studi di Torino*
Awarded for graduating with average $> 30/30$ — all but one mark *cum laude*.

Publications

The full and up-to-date list of my publications can be found at: trapasso.info/publications/.
Preprints are available in my  [arXiv profile](#).

Editorial responsibilities

2025 **Member of the Editorial Board**, *Advances in Operator Theory*, Springer Birkhäuser

2025 **Associate Editor**, *University Texts in the Mathematical Sciences*, Springer

Selected communications

- 2024 **Analysis and Applications Seminar** (TU Delft)
The ABCs of Sparsity and Singular Structures (RWTH Aachen)
Pseudo-Differential Operators and Related Topics (Ghent Analysis & PDE Center)
- 2023 **Seminario del Dipartimento di Matematica** (Trento)
Workshop on Quantum Harmonic Analysis (NTNU Trondheim)
XLII Convegno Nazionale di Analisi Armonica (Milano)
- 2022 **Giornate UMI: Matematica per l'Intelligenza Artificiale e il Machine Learning** (Torino)
OTAMP — Operator Theory, Analysis and Mathematical Physics (Stockholm)
Third Italian Meeting on Probability and Mathematical Statistics (Bologna)
International Conference "100 years UMI — 800 years UniPD" (Padova)
- 2021 **OPSO — One-Parameter Semigroups of Operators** (HSE Nizhny Novgorod)
Online International Conference on Computational Harmonic Analysis
XX International Congress on Mathematical Physics (YRS) (Geneva)
- 2020 **International Conference on Generalized Functions** (Ghent)
NuHaG Harmonic Analysis Seminar (Vienna)
- 2019 **DQ Seminar — Chair X** (Würzburg)
ATFA — Aspects of Time-Frequency Analysis (Torino)

Organization of scientific events

- Since 2025 **QuanTO — Quantum Lectures in Torino**
Founding member of the steering committee.
- Apr 2024 **Mathematical Aspects of Quantum Information**
~ 70 participants. 1 mini-course, 4 invited lectures.
- Sep 2022 **Summer School "Applied Harmonic Analysis and Machine Learning 2022"**
~ 100 enrolled participants. 3 mini-courses, 2 invited lectures, contributed workshop.

Jun 2021 **Microlocal and Time-Frequency Analysis – Virtual Days**

 ~ 70 participants, 11 international invited speakers.



Teaching activity

Ph.D. level

2024 **Scattering transforms: a tale of stability and scales**, *RWTH Aachen*

Invited minicourse — 3h.

2022 **A crash course on scattering networks**, *YAMC 2022*, *Arenzano*

Minicourse — 3h.

2022 **Harmonic analysis of scattering networks**, *Università degli Studi di Genova*

Lectures (taught in English) — 20h. Co-instructor: L. Ratti (10h).

Master level

2025/2026 **Real and functional analysis**, *Università degli Studi di Torino*

2023/2024 Exercise classes (taught in English) — 50h. Degree course in Stochastics and Data Science.

2017/2018 **Microlocal and time-frequency analysis**, *Università degli Studi di Torino*

Exercise classes — 20h. Degree course in Mathematics.

Bachelor level

2025/2026 **Metodi matematici per l'ingegneria**, *Politecnico di Torino*

Lectures and exercise classes — 20h. Degree course in Computer Engineering (year II).

2025/2026 **Analisi matematica I**, *Politecnico di Torino*

Lectures (>250 students) — 60h. Degree course in Engineering (year I).

2022–2025 **Istituzioni di matematiche**, *Politecnico di Torino*

Lectures and exercise classes (>150 students) — 50+30h. Degree course in Architecture (year I).

2020/2021 **Analisi matematica II**, *Politecnico di Torino*



Exercise classes — 20+20h. Degree course in Biomedical Engineering (year II).

2019/2020 **Analisi matematica I**, *Politecnico di Torino*

2018/2019 Exercise classes (>250 students) — 60h. Degree course in Engineering (year I).

2016/2017 **Geometria e algebra lineare I**, *Università di Torino*

Exercise classes — 50h. Degree course in Physics (year I).

Professional teacher training

2025 **Learning to Teach (L2T)**, *TLLab*, *Politecnico di Torino*, 40h course

2017–2018 **PREFIT training program**, *CIFIS*, *Università degli Studi di Torino*, 24+6 CFU



Popularization activities

2024, 2025 **UNIGHT — Notte Europea delle Ricercatrici e dei Ricercatori**, *Torino*