

François L. A. Visconti

Professional Address:

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Nationality: French
Born on 24/12/1998

Update: May 2025

Education

- Apr. 2023 - on going **Ph.D. in Mathematics**, *Mathematisches Institut der LMU*, Munich, Germany
Advisor: Phan Thành Nam, co-advisor: Arnaud Triay
- 2019 - 2023 **Eng. degree**, *École des Ponts ParisTech (ENPC)*, Paris, France
Thesis written at the *Mathematisches Institut der LMU*, Munich, Germany
Thesis title: *Dilute Bose gas: derivation of the non-linear Schrödinger functional with two-body and three-body interactions*
Advisor: Arnaud Triay
- 2019 - 2022 **M.Sc. in Mathematics**, *École des Ponts ParisTech (ENPC)*, Paris, France
Thesis written at the *Department of Mathematics der TUM*, Munich, Germany
Thesis title: *Comparison of model approaches for bacterial Quorum Sensing and Quorum Sensing Inhibition*
Advisor: Christina Kuttler
- 2017 - 2019 **Classes préparatoires aux grandes écoles**, *Lycée Janson de Sailly*, Paris, France
MPSI/MP.

Preprints

- [4] François L. A. Visconti. *Hilbert–Schmidt norm estimates for fermionic reduced density matrices*. 2025. arXiv: [2504.03488 \[math-ph\]](#).
- [3] Lukas Junge and François L. A. Visconti. *Derivation of Hartree theory for two-dimensional attractive Bose gases in very dilute regime*. 2024. arXiv: [2410.23150 \[math-ph\]](#).
- [2] Lukas Junge and François L. A. Visconti. *Ground state energy of a dilute Bose gas with three-body hard-core interactions*. 2024. arXiv: [2406.09019 \[math-ph\]](#).
- [1] François L. A. Visconti. *Ground state energy of the low density Bose gas with two-body and three-body interactions*. 2024. arXiv: [2402.05646 \[math-ph\]](#).

Fellowships and Grants

- 2025 **LMU Mentoring program**
Research funds for excellent junior academics.

Invited Talks

Jan. 2025 TRR 352 Junior Meeting,
Stuttgart, Germany

Talks in seminars

Dec. 2024 Oberseminar: Calculus of Variations and Applications,
Ludwig-Maximilians-Universität München, Germany

Contributed Talks

Feb. 2025 Mathematical Challenges in Quantum Mechanics,
Gran Sasso Science Institute, L'Aquila, Italy

Jul. 2024 Summer School on Current Topics in Mathematical Physics,
Universität Zürich, Switzerland

Oct. 2022 MMSC - Workshop on Mathematical Modeling and Scientific Computing,
Technische Universität München, Germany

Poster Sessions

Dec. 2024 Mathematical Physics and PDEs,
Herrsching, Germany

Attended Summer Schools and Conferences

Mar. 2025 TRR 352 Winter School on Mathematical Physics,
Kochel am See, Germany

Oct. 2024 Mini-workshop on condensed matter physics,
Farchant, Germany

Oct. 2024 Annual Retreat of the CRC TRR 352,
Farchant, Germany

Jun. 2024 3rd ISTA Summer School in Analysis and Mathematical Physics,
Klosterneuburg, Austria

Mar. 2024 TRR 352 Winter School on Mathematical Physics,
Kochel am See, Germany

Oct. 2023 Kick-off Meeting of the CRC TRR 352,
Farchant, Germany

Oct. 2023 Workshop for young researchers in analysis and mathematical physics,
Ludwig-Maximilians-Universität München, Germany

Aug. 2023 Workshop - Recent advances in Bose-Einstein condensation,
Technische Universität München, Germany

Aug. 2023 Summer School - Current Topics in Mathematical Physics,
University of Warsaw, Poland

Jul. 2023 WYRMP - Workshop of Young Researchers in Mathematical Physics,
Ludwig-Maximilians-Universität München - IHK Akademie Westerham, Germany

Jun. 2023 Summer School - Recent Advances in Quantum and Statistical Mechanics,
Hausdorff School for Advanced Studies in Mathematics, Bonn, Germany

Jan. 2023 Workshop - On Fermionic Quantum Systems,
Center for Advanced Studies, Munich, Germany

Academic Services

2025 **Member of the Junior Committee of the CRC TRR 352**
Representing the junior members and organising the yearly retreat

Teaching

2024 - 2025 **Teaching assistant**, *Mathematisches Institut der LMU*, Munich, Germany
2025 Foundations of mathematics II (German)
2024 Ordinary differential equations (German)

Languages

French Native
English Bilingual
German Fluent
Italian Upper-intermediate

Hobbies

Climbing, hiking, literature