# Pietro Mesquita Piccione

# Résumé





### Education

- 2022 PhD in Mathematics, Paris VI, Sorbonne Université, Paris, France
- current Advisors: Sébastien Boucksom and Tat Dat To
- 2021 2022 Master's Degree in Mathematics, Paris VI, Sorbonne Université, Paris, France
- 2017 2021 **Bachelor's degree in Mathematics**, *Universidade de São Paulo*, USP, São Paulo, Brazil Prize for outstanding performance.

# Research projects and grants

- 2022 **MathInParis2020**, *Scholarship for a PhD in Paris*, Cofunded by Marie Sklodowska-Curie Actions, current FSMP
- 2021 2022 **PGSM Scholarship**, *Scholarship for a Master's degree in Paris*, Fondation Sciences mathématiques de Paris
- 2020 2021 **Morse Theory**, *Undergraduate Research Project*, FAPESP Grant FAPESP 2020/04871-0

# Writing

- 2024 A non-archimedean theory of complex spaces and the csc-K problem, *Article in preparation*, Sorbonne Université
- 2022 L<sup>2</sup> techniques in Complex Geometry, Master Thesis, Sorbonne Université
- 2021 Morse Theory, Undergraduate Thesis, Universidade de São Paulo

#### **Talks**

- 2024 **The non-archimdean approach of the Yau-Tian-Donaldson conjecture**, *Séminaire des Thésards*, *IMJ-PRG*, Université Paris Cité, France
- 2024 **The non-archimdean approach of the Yau-Tian-Donaldson conjecture**, *Demi-Journée des doctor-ant.e.s de l'équipe TGA 2024*, *IMJ-PRG*, Sorbonne Université, France
- 2022 **A counterexample for the periodic orbit conjeture**, *Groupe De Travail Dynamiques Sauvages*, *IMJ-PRG*, Sorbonne Universite, France
- 2021 A Tale of Geometry, S4, Instituto de Matemática e Estatística, Universidade de São Paulo, Brazil
- 2020 **Morse Theory in 15 Minutes**, Senior Thesis Presentation, Instituto de Matemática e Estatística, Universidade de São Paulo, Brazil
- 2020 **Is the Earth flat? A talk about curvature**, *S4*, *Instituto de Matemática e Estatística*, Universidade de São Paulo, Brazil

## Professional

#### Events attended

- 2024 Summer school on Complex Geometry and canonical metrics, CRM, Montréal, Canada
- 2023 Global invariants of arithmetic varieties, CIRM, Luminy, France
- 2023 Summer School and Worskhop "Advances in special Kähler metrics", Le Croisic, France

- 2023 Complex analysis and geometry: celebrating the 70+1th birthday of László Lempert, *Rényi Institute*, Budapest, Hungary
- 2022 Géométrie : échanges et perspectives, Insitut Henri Poincaré, Paris, France
- 2021 Géométrie : échanges et perspectives, Insitut Henri Poincaré, Paris, France
- 2019 **32nd Brazilian Mathematics Colloquium**, *IMPA*, Rio de Janeiro, Brazil
- 2018 ICM 2018, International Congress of Mathematicians, Rio de Janeiro, Brazil

#### **Events Organized**

- 2022 MaThematical Days: Paul Erdös, Universidade de São Paulo, São Paulo, Brazil
- 2021 MaThematical Days: Emmy Noether, Universidade de São Paulo, São Paulo, Brazil
- 2021 MaThematical Days: Élie Cartan, Universidade de São Paulo, São Paulo, Brazil

#### Academic Services

- 2021 **Organizer of the A5 Group**, *A student runned academic group*, *Instituto de Matemática e Estatística*, Universidade de São Paulo, Brazil

  Over 25 weekly seminars organized
- 2019 **Deputy Student Representative in the Mathematics Department Council**, Instituto de Matemática e Estatística, Universidade de São Paulo, Brazil
- 2018 **Deputy Student Representative in the Mathematics Department Council**, Instituto de Matemática e Estatística, Universidade de São Paulo, Brazil

#### Current Teaching

- 2024/1 **Teaching Assistantship**, Functional Analysis, Paris VI, Sorbonne Université, France Past Teaching
- 2023/2 **Teaching Assistantship**, *Topology and Differentiable Calculus*, *Paris VI*, Sorbonne Université, France
- 2020/2 **Teaching Assistantship**, Introduction to Algebraic Topology, Instituto de Matemática e Estatística, Universidade de São Paulo, Brazil
- 2019/2 **Teaching Assistantship**, *Introduction to Analysis*, *Instituto de Matemática e Estatística*, Universidade de São Paulo, Brazil
- 2019/1 **Teaching Assistantship**, Differentiable functions and series, Instituto de Matemática e Estatística, Universidade de São Paulo, Brazil
- 2018/2 **Teaching Assistantship**, Calculus II, Escola Politecnica, Universidade de São Paulo, Brazil

## Other Info

### Related Activities

- 2021 2022 **Reading Seminar on Wild Dynamics**, *Groupe De Travail Dynamiques Sauvages*, IMJ-PRG, Sorbonne Université
  - 2021 **Summer IMPA**, *Differential topology graduate course*, IMPA, Rio de Janeiro, Brazil Online due to COVID
  - 2020 **Summer IMPA**, Functional Analysis graduate course, IMPA, Rio de Janeiro, Brazil with financial support
  - 2018 **Summer IMPA**, *Real Analysis*, IMPA, Rio de Janeiro, Brazil with financial support

#### Languages

Portuguese Native Speaker

Italian Native Speaker

English Fluent

Spanish Fluent

French Fluent

Catalan Intermediate

## Links

Lattes http://lattes.cnpq.br/7822745238118143
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References

Reference I Sébastien Boucksom

Reference II Tat Dat To