

TIMOTEI Paul-Emmanuel

PhD student

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Research fields

I work in singularity theory and am more specifically interested in the work of the end of the 19th century in Europe and in resolution of singularities.

Formation

University

- 2022– **PhD**, CNRS - SPHERE Laboratory - Université Paris Cité, Paris, France ; Title: Interactions between mathematics and the history of mathematics: historical approach and contemporary perspectives based on the report by Alexander Brill and Max Noether, *Die Entwicklung der Theorie der algebraischen Functionen in älterer und neuerer Zeit* (1894), Under the direction of Ms. Karine CHEMLA and Mr. Patrick POPESCU-PAMPU
- 2021/2022 **2nd year Master of Fundamental Mathematics**, Université Paris Cité, Paris, France, in collaboration with the Faculté des Sciences et Ingénierie de Sorbonne Université and the Université Sorbonne Paris Nord; Mention: Assez bien
- 2020/2021 **1st year Master of Mathematics and Applications Jacques Hadamard course**, Université Paris-Saclay, Orsay, France, in collaboration with the Ecole Normale Supérieure de Paris-Saclay and the Ecole Polytechnique (IPP); Mention: Assez bien
- 2019/2020 **3rd year of a Licence in fundamental and applied mathematics**, Université Paris-Saclay, Orsay, France
Mention: Bien

CPGE

- 2018/2019 **CPGE MP**, Collège Stanislas, Paris, France; Mention: A
- 2017/2018 **CPGE MPSI**, Collège Stanislas, Paris, France; Option: S2I, Language: English, Mention: B

Baccalauréat

- 2017 **Scientific Series**, Lycée Paul Lapie, Courbevoie, France; Series: S-SVT, Speciality: Mathematics, Option : Ancient Greek, Mention: Bien

Conferences

2024

- 30.06–03.07 **Workshop on History of Modern Mathematics**, Xi'an, China

- 23.06–29.06 **1st Tianyuan & 6th International Conference on History of Modern Mathematics**, Institute for Advanced Studies in History of Science, Northwest University, Kunming, China
- 24.05 **Changing Channels: Constructing and comparing national identities in French and British mathematics, c. 1800–1840**, Histoire des mathématiques Seminar, Institut Henri Poincaré (IHP), Paris, France
- 18.03 **Dear Jeremy**, SPHERE Laboratory, Paris, France
- 02.03 **Research in Progress**, British Society for the History of Mathematics, Oxford, England
- 2023
- 06.11–07.11 **Colloquium in honour of Eberhard Knobloch**, SPHERE Laboratory, Paris, France
- 30.10–03.11 **The Brill-Noether report on the theory of algebraic functions (1894): translation and analysis**, CIRM, Marseille, France
- 15.09–16.09 **33rd Novembertagung**, Rijeka, Croatia
- 12.06–17.06 **115AM - Algebraic and topological interplay of algebraic varieties**, *A Conference in Honor of the 60th Birthday of Enrique Artal and the 55th Birthday of Alejandro Melle*, Jaca, Spain
- 27.03–31.03 **Expressions of Mathematical Activity : Traces and Histories**, GDR 3398 Histoire des Mathématiques, CIRM, Marseille, France
- 04.01–06.01 **ANR SINTROP**, Lille, France
- 2022
- 12.12–16.12 **Brill & Noether**, Lille, France
- 07.12–09.12 **Colloque international à l'occasion du bicentenaire de la naissance du mathématicien Charles Hermite (1822–1901)**, Paris, France
- 19.10–20.10 **FPMW14**, Nantes, France

Experience

Communications

2024

- 04– **Presentation of the translation of Section VI of the text by Alexander Brill and Max Noether: *Die Entwicklung der Theorie der algebraischen Functionen in älterer und neuerer Zeit* (1894)**, Brill & Noether Group of Translation
- 30.06–03.07 **Comparing two approaches to the reduction of singularities developed by Georges-Henri Halphen: the changing meaning of the geometric**, Workshop on History of Modern Mathematics, Xi'an, China
- 23.06–29.06 **Comparing Max Noether's and Georges-Henri Halphen's approaches to the reduction of singularities**, 1st Tianyuan & 6th International Conference on History of Modern Mathematics, Kunming, China
- 10.06 **Georges-Henri Halphen's approaches to the reduction of singularities**, Mathématiques 19^è–21^è, histoire et philosophie Seminar, SPHERE Laboratory, Paris, France
- 15.05 **The resolution of singularities: a bit of history and the method by blow-ups**, Réseau des Étudiants en Géométrie Algébrique Seminar, Paris, France

- 02.04 **Translation: A Phenomenon Inside and Outside of Language**, Approches historiques, philosophiques et anthropologiques des nombres, de la mesure et de la mesurabilité Seminar, Paris, France
- 04.03 **Answering Jeremy Gray's "Algebra and/or geometry" conference**, Histoire et philosophie des mathématiques Seminar, SPHERE Laboratory, Paris, France
- 02.03 **The reduction of singularities according to Max Noether and Georges-Henri Halphen: What did *more geometric* mean?**, British Society for the History of Mathematics, Research in Progress Conference, Oxford, England
- [2023](#)
- 18.12 **Round-table : Algebraic approaches of curves**, Histoire et philosophie des mathématiques Seminar, SPHERE Laboratory, Paris, France
- 30.10–03.11 **Presentation of part of the translation of Section VI of the text by Alexander Brill and Max Noether: *Die Entwicklung der Theorie der algebraischen Functionen in älterer und neuerer Zeit (1894)***, The Brill-Noether report on the theory of algebraic functions (1894): translation and analysis, CIRM, Marseille, France
- 16.09 **Halphen *more geometric* than Noether**, 33rd Novembertagung, Rijeka, Croatia
- 16.05 **The reduction of singularities of a plane algebraic curve by correspondence with Georges-Henri Halphen**, Mathématiques 19è–21è, histoire et philosophie Seminar, SPHERE Laboratory, Paris, France
- 26.04 **Notices on life and work: the case of G.-H. Halphen**, DISc Seminar, SPHERE Laboratory, Paris, France
- 04.04 **Singularity theory and history through the eyes of mathematicians**, Journée doctorale ED 623, Université Paris Cité, Paris, France
- [2022](#)
- 12.10 **A text by Brill & Noether, mathematics and a method**, DISc Seminar, SPHERE Laboratory, Paris, France
- [Organisation](#)
- 2023–2025 **Mathématiques 19è–21è, histoire et philosophie Seminar**, SPHERE Laboratory, Paris, France
- 2023/2024 **DISc Seminar**, SPHERE Laboratory, Paris, France
- [2025](#)
- 24.02–08.03 **Working group/mini-workshop on the Brill-Noether translation project**, Newton Institut, Cambridge, England
- [2024](#)
- 13.11–15.11 **34th Novembertagung on the History and Philosophy of Mathematics, *Unifying the Old and the New: A Cross-Section of Contemporary Researches into History and Philosophy of Mathematics***, Belgrad, Serbia
- 21.03 **Biography / prosopography and the practice of history by scientists**, DISc Seminar, SPHERE Laboratory, Paris, France
- [2023](#)
- 28.12 **Meeting on the research theme: Mathematical Practices**, SPHERE Laboratory, Paris, France

- 18.12 **Algebraic approaches of curves**, Histoire et philosophie des mathématiques Seminar, SPHERE Laboratory, Paris, France
- 17.11 **Calculation/Computation and Proof**, Mathématiques 19è–21è, histoire et philosophie Seminar, SPHERE Laboratory, Paris, France
- 30.10–03.11 **The Brill-Noether report on the theory of algebraic functions (1894): translation and analysis**, CIRM, Marseille, France
- 16.05 **The reduction of singularities**, Mathématiques 19è–21è, histoire et philosophie Seminar, SPHERE Laboratory, Paris, France
- 26.04 **Notices, Obituaries and Biographies by scientists**, DISc Seminar, SPHERE Laboratory, Paris, France

Project - Research Internship

- 2022 **A long exact Künneth sequence in cylindrical contact homology**, Université Paris-Saclay, Orsay, France; Memoir under the direction of Mr. Frédéric BOURGEOIS
- 2021 **The turning of the sphere**, University Paris-Saclay, Orsay, France; Memoir under the direction of Mr. Patrick MASSOT
- 2021 **Basis of Scale Relativity**, Observatoire de Paris-Meudon, Paris, France; Under the direction of Mr. Thierry LEHNER
- 2020 **Basics of Differential Geometry**, Université Paris-Saclay, Orsay, France; Under the direction of Mr. Joël MERKER
- 2020 **Basis of General Relativity**, Observatoire de Paris-Meudon, Paris, France; Under the direction of Mr. Thierry LEHNER
- 2019 **Isometric transport**, Collège Stanislas, Paris, France; TIPE under the direction of Mr. Raphaël SHABETAI
- 2018 **Collision and three-body problem**, Collège Stanislas, Paris, France; TIPE under the direction of Mr. CANDELON

Teaching

- 2023/2024 **TDs in L1 - Mathématiques Approfondies**, Sorbonne Université, Paris, France
- 2023/2024 **TDs in L2 - Algèbre linéaire**, Sorbonne Université, Paris, France
- 2020/2021 **Colles of Mathematics in CPGE**, CPGE MPSI, Collège Stanislas, Paris, France
- 2020 **Private lessons**, CPGE MPSI, Paris, France
- 2019/2020 **Private lessons**, Terminale Scientifique, Orsay, France

Book

- 2019 **Tutos de Maths - Bac Terminale S**, Mr. Arnaud BERNIGOLE, editions Ellipses; Participation in the writing of the book

Scholarship

- 2024 **GDR/RT 2183 Histoire des maths et didactique - HiDiM – Mission funding**, France
- 2024 **ICHM Grants for International Research-Related Activity**, British Society for the History of Mathematics, Research in Progress Conference, England
- 2023 **DAAD – Research Grants - Short-Term Grants**, Archives research in Göttingen, Germany

2023 **GDR 3398 Histoire des Mathématiques – Mission funding**, France

Competition

CPGE

2019 **X-ENS, Mines-Ponts, Centrale-Supélec, CCINP, Mines-Télécom**

Concours Général

2018 **Concours Général de Théologie**, Collège des Bernardins, Paris, France

2017 **Concours Général de Mathématiques**, Académie Versailles, Selected for the Pépinière de Mathématiques, Académie de Versailles

2017 **Concours Général de Philosophie**, Académie de Versailles

Competencies

- Software : Python, SageMath, GéoGébra, \LaTeX , Pack Office
- Languages : Français, English, Español, Deutsch, Latin, Ancient Greek