

Research Interests

Complex and Differential Geometry, geometric analysis and PDEs, more precisely, complex de Monge-Ampère equations, canonical metrics, and geometric flows

Employment

- 2025– **Postdoc**, Yau Mathematical Sciences Center, Tsinghua University, Beijing
2022–2025 **Postdoc**, International Centre for Theoretical Physics (ICTP), Italie

Education

- 2019–2022 **Doctorat de Mathématiques Fondamentales**, LMO, Université Paris-Saclay
Title: Pluripotential Monge-Ampère flows
Advisors: Hoang-Chinh LU & Vincent GUEDJ
2017–2019 **Master de Recherche en Mathématiques Fondamentales**, Université Paris-Saclay
2013–2017 **Bachelor of Education**, Hanoi National University of Education
Excellent, Mathematics

Publications et preprints

- 2025 *Modulus of continuity of Monge-Ampère potentials in big cohomology classes* (with Hoang-Son Do, Hoang Hiep Pham), arXiv:2504.15763
Singularities vs non-pluripolar Monge-Ampère masses (with Hoang-Son Do, Hoang Hiep Pham), arXiv:2503.07534, accepted for publication in **Math. Z.**
2024 *An iterative construction of complete Kähler-Einstein metrics* (with Tat Dat Tô), arXiv:2410.12599
Hermitian null loci, arXiv:2404.01126v1
2023 *Kähler-Einstein metrics on quasi-projective manifolds* (with Duc-Viet VU), arXiv:2309.03858, **Math. Ann.** **392**, 4071–4103 (2025)
Singularities of the Chern-Ricci flow, arXiv:2305.16461, to appear in **Anal. PDE**
Continuity of Monge-Ampère Potentials with Prescribed Singularities, **J. Geom. Anal.** **33**, 318 (2023).
2022 *Pluripotential Chern-Ricci Flows*, **Indiana Univ. Math. J.** **73** No. 4 (2024), 1401–1441

- 2021 *Pluripotential Monge-Ampère flows in big cohomology classes*, **J. Funct. Anal.** **282** (2022), no. 6, Paper No. 109373, 65 pp.
Continuity of Monge-Ampère Potentials in Big Cohomology Classes, **Int. Math. Res. Not. IMRN** **2022**, no. 14, 11180–11201.

Talks

- June 2025 Workshop: Géométrie Algébrique et Géométrie Complexe, M'bour, Senegal
 Jan. 2025 Analysis Seminar, Institute of Mathematics, VAST, Hanoi, Vietnam
 Jan. 2025 Geometry Seminar, Hanoi University of Sciences, Hanoi
 Dec. 2024 Séminaire Géométrie et Topologie, Brest
 Dec. 2024 Séminaire d'Analyse et Géométrie, Jussieu
 Oct. 2024 Seminari di Geometria Differenziale e Analisi Complessa, Florence, Italy
 Sep. 2024 Conference: Progressi recenti in geometria reale e complessa XIII, 24-27 Sep, Levico Terme (Italy)
 Aug. 2024 Gothenburg Complex Geometry, 26-30 Aug., Gothenburg (Sweden)
 Sep. 2023 Workshop: Geometric flows on complex manifolds, 11-15 Sep, Cortona (Italy)
 June 2023 ICTP-IGAP seminar, Trieste, Italy
 Feb. 2023 Complex Geometry seminar, Cologne, Germany
 Jan. 2023 Analysis Seminar, Institute of Mathematics, VAST, Hanoi, Vietnam
 Nov. 2022 ICTP-IGAP seminar, Trieste, Italy
 June 2022 International Workshop, AIAS, Aarhus, Denmark
 June 2022 MARGE Workshop, IMAG, Montpellier, France
 April 2022 IGA seminar, University of Maryland, New York, United States
 Nov. 2021 Informal Workshop: Balanced metrics and Monge-Ampere masses, Parma, Italy
 Oct. 2021 Séminaire de Géométrie Complexe, IMT, Toulouse
 June 2021 Journée doctorale: Analyse, LMO, Orsay, France

Service

Referee for International Mathematics Research Notices, Acta Mathematica Vietnamica, Complex Manifolds, Complex Analysis and Operator Theory, Analysis & PDE, Indiana University Mathematics Journal
 Reviewer for MathSciNet

Teaching

- 2024-2025 Topology (12h TA), Partial Differential Equations (9h TA)
 2023-2024 Partial Differential Equations (9h TA)
 2022-2023 Partial Differential Equations (9h TA)
 2021-2022 Analyse 3 en L2 (TD 36h), Mathématiques en L1 (32h TA), Python (6h TA)
 2020-2021 Mathématiques en L1 (62h TA)

Languages

Vietnamese (mother tongue), English (fluent), French (fluent), Italian (intermediate), Chinese (basic)

Informativ

L^AT_EX, language html, Python, Microsoft Office