

# Quang-Tuan DANG

*Postdoc at ICTP*

International Centre for Theoretical Physics (ICTP)

Str. Costiera, 11, 34151 Trieste, TS, Italie

☎ (+39) 0402240274

✉ qdang@ictp.it

🌐 [quangtuandang.github.io/Webpage/](https://quangtuandang.github.io/Webpage/)

## Research Interests

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

## Employment

2022– **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

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, to appear in **Math. Ann.**

*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.

## Talks

- 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-Ampère 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)

---

## Informatic

L<sup>A</sup>T<sub>E</sub>X, langue html, Python, Microsoft Office

---

## Other interests

Vietnamese and Chinese literature

European culture: cinema, literature, music