

Muhan Luo

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Research Interests

Complex dynamics in higher dimensions, with emphasis on the dynamics of holomorphic correspondences and the equidistribution of periodic points.

Education

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| Sept. 2016 – Jul. 2020 | Peking University
<i>B.Sc. in Mathematics and Applied Mathematics</i> |
| Aug. 2021 – Jun. 2026 | National University of Singapore
<i>Ph.D. in Mathematics</i>
Supervisor: Tien-Cuong Dinh |

Publications and Preprints

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| 2024 | Equidistribution of graphs of holomorphic correspondences
Proc. Amer. Math. Soc. , 153 (2025), 2579–2589. |
| 2025 | Equidistribution of saddle periodic points for Hénon-like maps
(with Qi Zhou) preprint, arXiv:2502.20103 . |
| 2026 | Green currents of holomorphic correspondences on compact Kähler manifolds
(with Marco Vergamini) preprint, arXiv:2603.06093 . |
- Geometric structures of Green currents for holomorphic correspondences
(with Marco Vergamini) in preparation.

Talks

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| Mar. 2025 | Geometry, Topology and Dynamics Seminar
<i>National University of Singapore, Singapore</i> |
| Jul. 2025 | Complex Geometry, Complex Analysis and Dynamics
15-minute short talk, <i>CIRM, Marseille</i> |
| Jul. 2025 | Geometry Seminar
<i>Università di Pisa, Pisa</i> |

- Sept. 2025 Complex Geometry & Dynamics @ Lille 2025
Université de Lille, Lille
- Sept. 2025 Rencontre de l'ANR DynAtrois
Institut de Mathématiques de Bourgogne, Dijon
- Sept. 2025 Analysis, Dynamics and Geometry Seminar
Université d'Orléans, Orléans

Awards

- 2018 Yizheng Alumni Scholarship
Peking University
- 2021 NUS Research Scholarship
National University of Singapore
- 2025 Faculty of Science PhD Conference Award
National University of Singapore

Services

- Referee Journal of Geometric Analysis, Acta Mathematica Vietnamica
- Co-organizer Conformal Field Theories: Randomness and Geometry
 May. 2026 *Institute for Mathematical Sciences, Singapore*

Teaching Experiences

- Spring 2023 *Teaching Assistant, MA1521: Calculus for Computing (NUS)*
- Spring 2024 *Teaching Assistant, MA2101: Linear Algebra II (NUS)*
- Spring 2025 *Teaching Assistant, MA1521: Calculus for Computing (NUS)*
- Fall 2025 *Teaching Assistant, MA1521: Calculus for Computing (NUS)*

Invited Conferences

- Dec. 2022 Conference on Complex Analysis, Complex Geometry and Dynamics, in memory of
 Nessim Sibony
Université Paris-Saclay, Paris
- Jun. 2023 Facets of Complex Dynamics
Institut de Mathématiques de Toulouse, Toulouse

- Jun. 2024 Conference in memory of Jean-Pierre Demailly
Fourier Institute, Grenoble
- May 2025 From Complex Analysis to Quantization
Chern Institute of Mathematics, Tianjin
- Jul. 2025 Complex Geometry, Complex Analysis and Dynamics
CIRM, Marseille
- Aug. 2025 Arithmetic Dynamics and Diophantine Geometry
National University of Singapore, Singapore
- Sept. 2025 Complex Geometry & Dynamics @ Lille 2025
Université de Lille, Lille
- Sept. 2025 Rencontre de l'ANR DynAtrois
Institut de Mathématiques de Bourgogne, Dijon