Joshua Jordan

Curriculum Vitae

Department of Mathematics
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Education

2017–2023 **PhD in Mathematics**, *University of California – Irvine*, Irvine, CA
Thesis title: *Pluriclosed flow and generalized geometry*
Advisor: Prof. Jeffrey Streets

2013–2017 **BSc in Mathematics and Physics**, *Wright State University*, Dayton, OH

Appointments

2023–2026 **NSF-RTG Postdoctoral Scholar**, *University of Iowa*
Grant DMS-2038103. Conducting research on fully nonlinear partial differential equations on Hermitian manifolds under Prof. Hao Fang. Instructing introductory undergraduate courses – including Calculus and Linear Algebra – and a graduate topics course on complex differential geometry.

2017–2023 **Teaching Assistant**, *University of California – Irvine*
Assisted with instruction for undergraduate courses including Elementary Real Analysis, Calculus, Advanced Linear Algebra, and Partial Differential Equations.

2017–2023 **Research Assistant**, *University of California – Irvine*
Studied intrinsic geometric flows on non-Kähler manifolds under Prof. Jeffrey Streets.

Service

2019–2021 **Union Representative**, *UAW 2865 (now UAW 4811)*
Elected by graduate students in the math department to be a point-of-contact for the University of California – Irvine chapter of UAW 2865. Responsible for engaging new members and department-scale organizing efforts.

2021–2023 **Recording Secretary**, *UAW 2865 (now UAW 4811)*
Elected by graduate student-workers of University of California – Irvine to be a representative in contract negotiations. Responsible for organizing meetings, taking minutes, and facilitating discussions related to academic labor conditions.

Publications

- Jordan, J. "The parabolic split-type Monge-Ampère on split tangent bundle surfaces." *arXiv: 2507.07084*
- Fang, H. & Jordan, J. "On canonical metrics of complex surfaces with split tangent and related geometric PDEs." *J. Reine Angew. Math.* 823 (2025) 255-289.
- Jordan, J. "Generalized geometry and pluriclosed flow." *UC Irvine. eScholarship*.
- Garcia-Fernandez, M., Jordan, J., & Streets, J. "Non-Kähler Calabi-Yau geometry and pluriclosed flow." *J. Math. Pures Appl.* 177 (2023) 329-367.

- Jordan, J. "A steady length functional for Ricci flow." *Proc. Amer. Math. Soc.* 149 (2021) 397-406.
- Jordan, J. & Streets, J. "On a Calabi-type estimate for pluriclosed flow." *Adv. In Math.* 366 (2020) Article 107097.

Talks and Presentations

- "Canonical metrics on complex surfaces with split tangent." *Differential Geometry Seminar.* University of California – Irvine. (29 May 2025). Invited.
- "Generalized geometry and pluriclosed flow." *Differential Geometry, Topology, and Special Structures.* Graduate College, City University of New York. (14 March 2025). Invited.
- "On canonical metrics of complex surfaces with split tangent and related geometric PDEs." *Prairie Analysis Seminar.* University of Kansas. (26 October 2024). Contributed.
- "Non-Kähler Calabi-Yau geometry and pluriclosed flow." *4th Geometric Analysis Festival.* Jeonbuk National University. (2022). Contributed.