

Thomas Murphy

DETAILS Email: tmurphy@fullerton.edu
 Webpage: [Personal Website](#)

POSITIONS **California State University, Fullerton**

Associate Professor, Dept. of Mathematics, August 2020– .
Asst. Professor, Dept. of Mathematics, August 2014– August 2020.
Member of the Center for Computational and Applied Mathematics, October 2016 –.

McMaster University Britton Fellow, August 2013 - August 2014.

Université Libre de Bruxelles Postdoctoral Fellow, October 2011- September 2013.

VISITING **University of California Irvine** Visiting Associate Researcher, January -July 2022.
POSITIONS

EDUCATION **National University of Ireland: University College Cork (UCC).**
2011- Ph.D. in mathematics. 2007- M.A. in mathematics. 2005- B.A. in mathematics
and economics.

SELECTED A complete list is available [here](#)
PUBLICATIONS

1. **Quasi-Einstein metrics on sphere bundles** with S. Huang and T. Phan (CSUF undergraduates), to appear in *Involve*.
2. **Rigidity of SU_n -type symmetric spaces** with W. Batat, S.J. Hall and J. Waldron, submitted.
3. **Compact Hermitian symmetric spaces, coadjoint orbits, and the dynamical stability of the Ricci flow**, with S.J. Hall and J. Waldron, *J. Geom. Anal.*, 31, 6 (2021), 6195– 6218
4. **On the Hausdorff Dimensions of Fractal Curves**, with T. Alexander (CSUF undergraduate), in preparation.
5. **Random manifolds have no totally geodesic submanifolds**, with F. Wilhelm, *Michigan Math. Journal*, 68 (2019), 323-335.
6. **Destabilizing compact warped product Einstein manifolds**, with W. Batat and S. J. Hall, *Comm. Anal. Geom.*, 29 (2021) No. 5, 1061–1094.
7. **Complex Riemannian foliations of open Kähler manifolds**, with P.A. Nagy, *Transactions Amer. Math. Soc.*, 371 (2019), no. 7, 4895 – 4910.
8. **Bounding the first invariant eigenvalue of toric Kähler manifolds**, with S. J. Hall, *Math. Res. Lett.*, 24 (2017), 67-81.
9. **Conformally Kähler geometry and Quasi-Einstein metrics**, with W. Batat, A. Jizany and S. J. Hall, *Münster Jour. of Math.*, 8 (2015), 211-228.
10. **On the linear stability of Kähler–Ricci solitons**, with S. J. Hall, *Proc Amer. Math. Soc.*, 139 No. 9 (2011), 3327– 3337.

SELECTED INVITED

RESEARCH VISITS Newcastle University April 2019, Université de Quebec a Montreal, Canada November 2016, Princeton University August 2016, Université Paris Sud, France, July 2016, University of Oklahoma, April 2016, McMaster University, Canada, November 2015, King's College London, U.K. January 2016.

SELECTED INVITED
LECTURES

- Virtual Seminar on Geometry with Symmetries, November 2021.
- Third Geometric Analysis Festival (3 lectures), July 2021.
- International conference on *Geometric Analysis*, University of Science and Technology, Beijing, keynote speaker, June 2020 (cancelled due to Covid-19).
- International conference on *Symmetry and Shape: honoring Jürgen Berndt*, keynote speaker, October 2019.
- Special Session on differential geometry, AMS Sectional Meeting, U Hawaii, April 2019.
- Special Session on Generalizations of symmetric spaces, AMS Sectional Meeting, U Hawaii, April 2019.
- International Conference on *Current Developments and New Directions in Kaehler Geometry*, University of Notre Dame, June 2017.
- Geometry seminar, Université de Quebec a Montreal, Canada, November 2016.
- July 2016, Geometric Analysis seminar, UCSD.
- International Conference on “Recent Advances in Complex Differential Geometry”, CIMI (Toulouse, France), May 2016.
- Geometry Seminar, Stanford, December 2015.
- Geometry Seminar, U Oklahoma, November 2015.
- Geometry Seminar, Universidad de Murcia, July 2015.
- Geometry Seminar, UCSB, April 2015.
- Geometry and Topology Seminar, CSUF, March 2015.