

# Geometric Data Analysis Group

Department of Statistics, University of Washington  
(Autumn 2024 Introduction)

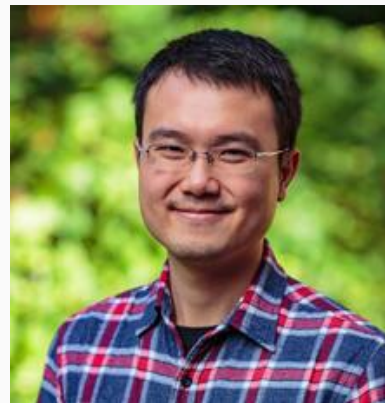


# History of the GDA Group

The Geometric Data Analysis (GDA) group was founded in Fall 2017 by our faculty members ([old website](#)):



Professor Marina Meila



Professor Yen-Chi Chen

Previous and current student organizers include ([current website](#)):



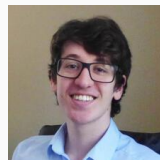
Samson Koelle  
(graduated in 2022)



Hanyu Zhang  
(graduated in 2023)



Jerry Wei  
(graduated in 2024)



James Buenfil  
(5th-year PhD student)



Yikun Zhang  
(3th-year PhD student)

## What Are We Interested In?

The topics of our research interests in Geometric Data Analysis include but not limited to:

- Topological data analysis.
- Manifold learning algorithms -- are they "correct"? How to detect and remove algorithmic artefacts.
- Higher order Laplacians and the analysis of vector fields on manifolds.
- Interpretable manifold coordinates.
- Nonparametric statistics on Riemannian manifolds.
- Optimization on smooth manifolds.
- etc...

More details can be found on our current website: <https://uwgeometry.github.io/>.

## Other Logistics

- We will meet biweekly from 5pm to 6pm on Mondays at CSSS or C301 conference room in Padelford Hall.
- No prerequisites are required for attending the reading group. Everyone is welcome to join!
- For student participants: if you plan to volunteer for a presentation or leading a discussion, you can sign up for one stat 600 credit with one of the faculty organizers.
- Potential paper list for presentations ([link](#)).
- You can add yourself to the group mailing list at <https://mailman12.u.washington.edu/mailman/listinfo/geometry>.

# Questions or Concerns?

Let's do some self-introductions:

- For current group members, please also give a short introduction to your research interests.
- For new student members, please feel free to introduce your name, year, program, and some academic background or previous research experiences.

