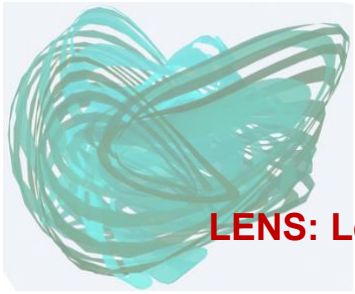

LENS: Learning and Exploitation of Latent Space Geometries

LENS Workshop Program (March 7th, 2026) -- (AZ Ballroom Salon 2)

Organizers: Pavan Turaga, Sudeep Sarkar, Anuj Srivastava

---------- **Setting up and Opening Remarks 8:15 – 8:30 am** ----------

Morning Session 1 (8:30 – 9:45am) –- Invited Talks (25 min each)

- (8:30 – 8:55am) **Soren Hauberg (DTU, Virtual) --** *Reparametrization invariance in Bayesian approximations*
- (8:55 – 9:20am) **Tom Fletcher (UVA)** -- *Learning Latent Space Group Actions*
- (9:20 – 9:45am) **Yulia Gel (Virginia Tech) --** *Leveraging Morse theory for diffusion on non-Euclidean objects*

---------- **Coffee Break (9:45 – 10:10 am)** ----------

Morning Session 2 (10:10am – noon) –- Invited Talks (25 min each)

- (10:10 – 10:35am) **Rene Vidal (UPenn):** *Exploiting Sparse Latent Concept Geometry for Steering Foundation Models*
- (10:35 – 11:00am) **Laurent Younes (JHU) --** *Data set approximations using embedded manifolds*
- (11:00 – 11:25am) **Chao Chen (Stonybrook):** *Topology-Driven Learning for Biomedical Images – Uncertainty, Synthesis, and Prediction*
- (11: 25 – 11:50am) **Yunye Gong (SRI, Virtual) --** *Topological representation learning for manifold study of deep neural networks*

---------- **Lunch Noon – 1:30** ----------

Afternoon Session 1 (1:30pm – 2:45 pm) –- Invited Talks (25 min each)

- (1:30 – 1:55pm) **Michael Kirby (Colorado State) -- TBA**
- (1:55 – 2:20pm) **Greg Chirikjian (MBZUAI, U of Delware):** *PRIMP: PRobabilistically-Informed Motion*
  Primitives for Efficient Affordance Learning From Demonstration
- (2:20 – 2:45pm) **Zach Lubberts (UVA):** *Community Detection on Networks using Discrete Ricci Flow*

Contributed Papers - Spotlights (30 mins, 2:45 – 3:15 pm) – 2.5 mins each

1. **Paper 3**: Geo-DMAE: Geometric Deep Multi-AutoEncoders for Monitoring Heterogeneous Normal Aging in Brain Subcortex

2. **Paper 5**: Latent Space Manifold Geometry for Robust Image Classification
3. **Paper 6**: Learning Domain Agnostic Latent Embeddings of 3D Faces for Zero-shot Animal Expression Transfer
4. **Paper 9**: Face Identity Unlearning for Retrieval via Embedding Dispersion
5. **Paper 11**: ARGS: Advanced Regularization on Aligning Gaussians over the Surface
6. **Paper 12**: Stabilizing Intrinsic Explanations: A Geometric Perspective on Concept Leakage
7. **Paper 14**: Improving Shape Bias in Learnable Geometric Moment Representations
8. **Paper 15**: Hyperbolic Embeddings Improve Narrative Quality in Retrieval-Augmented Generation Models
9. **Paper 16**: OrthoMDA: Curvature-Preserving Manifold Visualization for Regression Networks via Gram-Schmidt Orthogonalization
10. **Paper 7**: Multimodal Graph Representation Learning over Arbitrary Sets of Modalities

---------- **Coffee Break (3:15 – 3:30 pm)** ----------

Poster Session (3:30 – 4:30 pm) -- AZ Ballroom Pre-Function space