

From imaging algorithms to quantum methods Seminar

Report of Contributions

Contribution ID : 1

Type : **not specified**

Comparing GAN and Diffusion Models on an Interpretable 3D Voxel Dataset

Monday, 24 November 2025 10:00 (60)

Overview of generative models evaluated on a simple, visually interpretable 3D voxel dataset:

- Creation of an easy-to-interpret 3D voxel dataset derived from 2D characters
- Conditional WGAN-GP for fast 3D volume generation
- Conditional diffusion model for smoother and more coherent volumetric synthesis
- Evaluation using KID, PCC, and Separation Power metrics
- Comparative analysis of generative behavior across increasing dataset complexity

Presenter(s) : OGONOWSKI, Aleksander

Contribution ID : 2

Type : **not specified**

Discussion

Monday, 24 November 2025 11:00 (30)