



Workshop Geometry-Informed Machine Learning

September 2-5 2024
Mines Paris / PSL

Day 3

Symmetry and equivariance in Deep Learning

<https://site.unibo.it/calista/en/summary>



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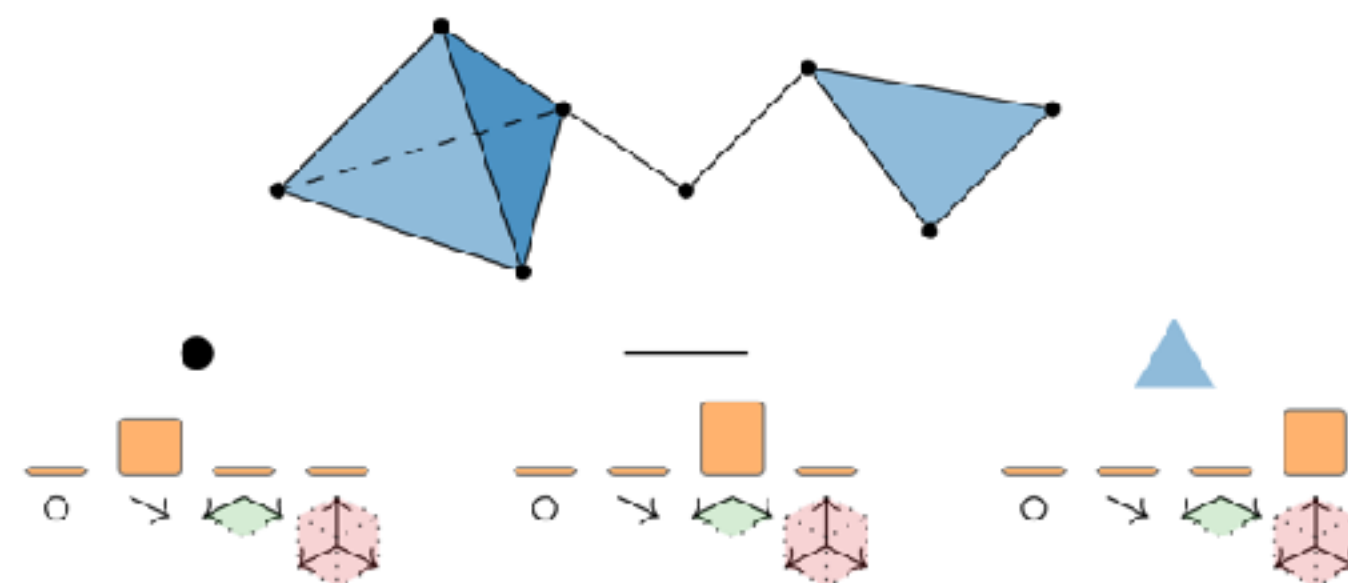
Edward Pearce-Crump
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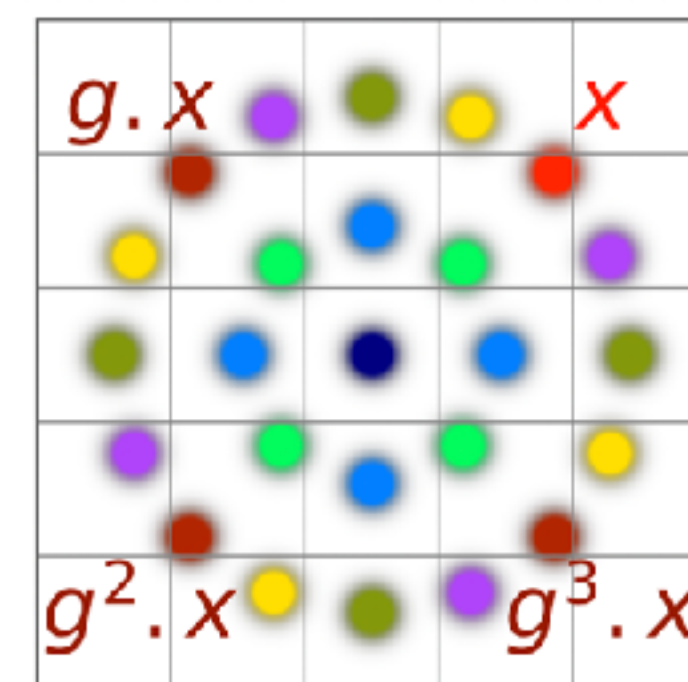
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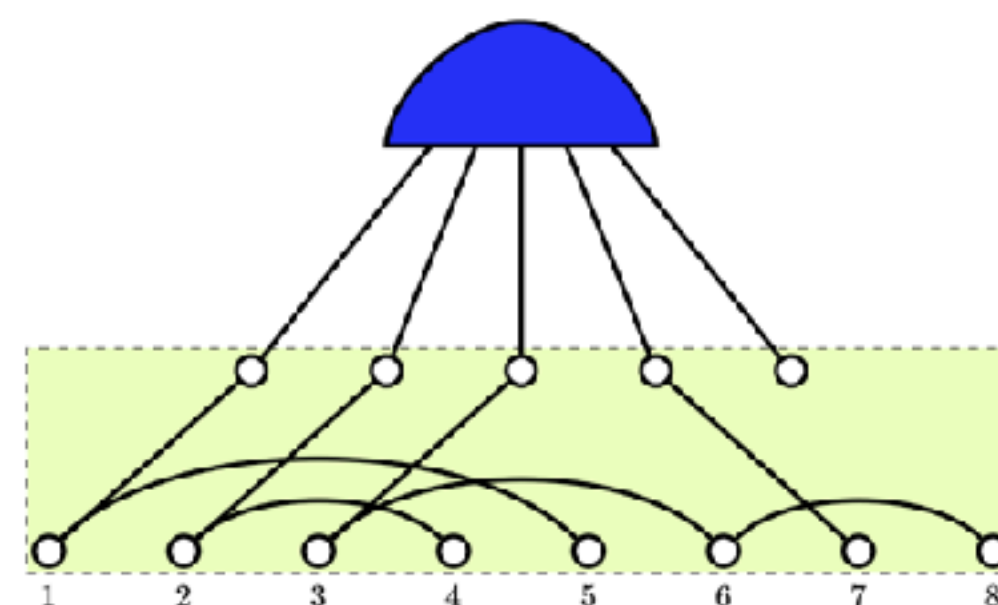
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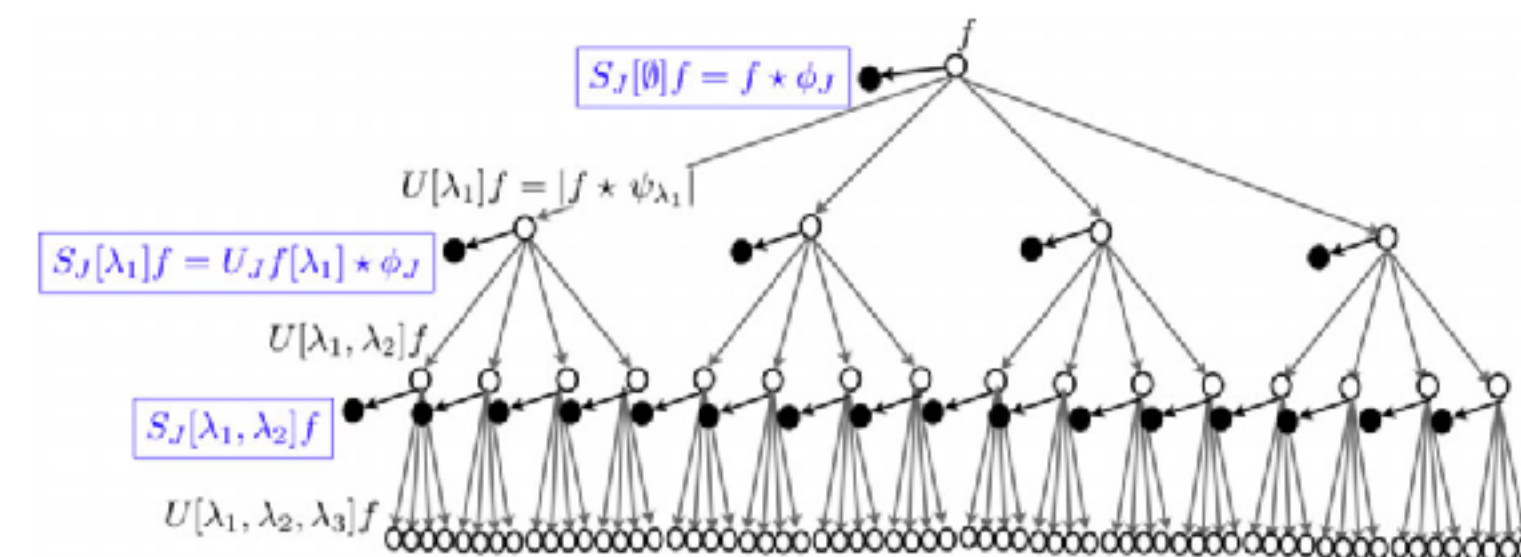
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Symmetry and equivariance in Deep Learning

Data Augmentation in High Dimensional Low Sample Size Setting using a **Geometry**-Based Variational Autoencoder

Stéphanie Allassonnière
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Geometric Algebra Representations for Geometric Deep Learning

David Ruhe
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Hard and soft equivariance priors via **Steerable CNNs**

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Diagrammatic Mathematics for Equivariant Deep Learning Architectures

Edward Pearce-Crump
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Multiscale Geometry of Images and Physics with Score Diffusion

Stéphane Mallat
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Symmetry and equivariance in Deep Learning



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10:00 - 10:30 Coffee Break +++
12:30 - 14:00 Lunch (Not included)
16:00 - 18:00 Poster Session (+ Coffee)



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Manager of master programs and masterclasses in AI in healthcare.

35>Journal Paper, 3 Patents

[Data Augmentation in High Dimensional Low Sample Size Setting using a geometry-based variational autoencoder](#)