

## Special Issue

# Deep Generative Modeling: Theory and Applications

### Message from the Guest Editor

The field of Generative Artificial Intelligence tackles the problem of formulating AI systems by combining probabilistic modeling and deep learning. More specifically, it aims for formulating deep generative models that could be used for defining generative processes, synthesizing new data, and quantifying uncertainty. This Special Issue is a forum for the presentation of new and improved deep generative models as well as their applications. In particular, theoretical considerations about deep generative modeling (e.g., an analysis with the help of statistical tools based on information theory), and real-life applications (e.g., in Life Sciences or Molecular Sciences) fall within the scope of this Special Issue.

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### Guest Editor

Dr. Jakub Tomczak

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### Deadline for manuscript submissions

closed (31 May 2024)



## Entropy

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### Message from the Editor-in-Chief

The concept of entropy is traditionally a quantity in physics that has to do with temperature. However, it is now clear that entropy is deeply related to information theory and the process of inference. As such, entropic techniques have found broad application in the sciences.

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### Editor-in-Chief

Prof. Dr. Kevin H. Knuth

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