

## **Generative Neural Networks for the Sciences**

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Generative modelling with normalizing flows has worked well in scientific applications like simulation-based inference. However, the peculiar design makes it difficult to incorporate prior knowledge (such as laws of physics or chemistry) into their architecture. Free-form flows eliminate this restriction by means of a new training algorithm. Manifold free-form flows elegantly exploit these opportunities in the case when we know that the data reside on a manifold. The talk will explain the underlying theory and present experimental evidence for the promising behavior of the new approach.