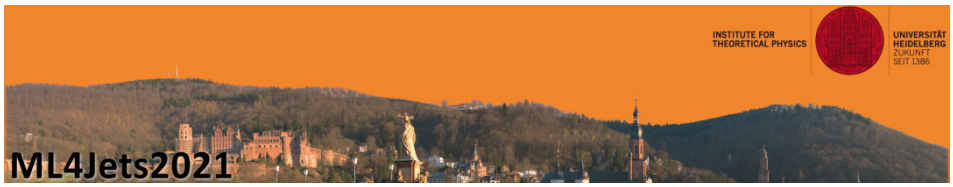

Contribution ID: **94** Type: **not specified**

Generative Networks with Uncertainties

Thursday, July 8, 2021 3:00 PM (20 minutes)

We show how Bayesian neural networks can be used to estimate uncertainties associated with regression, classification, and now also generative networks. For generative INNs, the combination of the learned density and uncertainty maps also provide insights into how these networks learn. These results show that criticizing the use of neural networks in LHC physics as black boxes is a sociological rather than scientific statement.

Academic Rank

Affiliation

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Presenters: LUCHMANN, Michel; PLEHN, Tilman

Session Classification: Interpretability, Robustness, and Uncertainties