## IRN Terascale @ IPHC Strasbourg



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## **Generative Unfolding with Distribution Mapping**

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Machine learning enables unbinned, highly-differential cross section measurements. A recent idea uses generative models to morph the measured distribution into the unfolded distribution. We show how to extend two morphing techniques, Schrödinger Bridges and Direct Diffusion, in order to ensure that the models learn the correct conditional probabilities. This brings distribution mapping to a similar level of accuracy as the state-of-the-art conditional generative unfolding methods. Numerical results are presented with a standard benchmark dataset of single jet substructure as well as for a new dataset describing a 22-dimensional phase space of Z + 2-jets.

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