

## Learning when you know (almost) nothing Techniques for machine learning directly from (unlabeled) data

SIII SLAC

Lucio Dery, Patrick Komiske, Eric Metodiev, <u>Benjamin Nachman</u>, Francesco Rubbo, Matt Schwartz, Ariel Schwartzman, Jesse Thaler

## Usual paradigm: train in simulation, test on data.



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If data and simulation differ, this is **sub-optimal**!

## Solution: learn directly from (unlabeled) data. Two paradigms:





E. Metodiev, **BPN**, J. Thaler, JHEP 10 (2017) 51



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