Critical temperature from unsupervised deep learning autoencoders

Tuesday 28 September 2021 10:50 (50 minutes)

We discuss deep learning autoencoders for the unsupervised recognition of phase transitions in physical systems formulated on a lattice. We elaborate on the applicability and limitations of this deep learning model in terms of extracting the relevant physics. The results are shown in context of 2D, 3D and 4D Ising, phi^4 and XY models.

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