

Quantitative machine learning study of the critical 2D Ising model

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In the last few years, machine learning techniques have been applied to a large variety of classification problems. In this talk, we present a quantitative study of the critical behavior of an exactly solved model, the 2D Ising model, performed using a quadratic kernel Support Vector Machine. Under very mild assumptions, the critical exponents and the critical temperature are obtained with a precision comparable to that of reweighting methods.

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