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The light-front coupled-cluster approach to scalar theories with and without symmetry breaking SOPHIA CHABYSHEVA, University of Minnesota-Duluth — The light-front coupled-cluster method is applied to various two-dimensional scalar theories, including wrong-sign ϕ^4 theory. This tests the utility of the method in the detection of spontaneous symmetry breaking, an important precursor to a nonperturbative formulation of the Higgs mechanism.

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