

Abstract Submitted
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Numerical evidence for unstable magnons at high fields in the square lattice Heisenberg antiferromagnet OLAV F. SYLJUÅSEN, Department of Physics, University of Oslo — We have found numerical evidence for decaying magnons in the square lattice spin-1/2 Heisenberg antiferromagnet when it is exposed to a strong external magnetic field. The results are obtained using Quantum Monte Carlo simulations combined with a Bayesian inference technique to obtain dynamics, and are consistent with earlier predictions from spin wave theory.

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