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Quench dynamics of the Heisenberg chain[1] DEEPAK IYER, NATAN ANDREI, Department of Physics & Astronomy, Rutgers University — We study the time evolution of the one dimensional Heisenberg chain after a quench from strongly (anti-)ferromagnetic coupling to the isotropic point ($\Delta = 1$). We generalize the Yudson integral representation for arbitrary states to the Heisenberg model and use it to study time-evolution of observables and correlation functions.

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