

## Short-Time Dynamics of Random-Bond Potts Ferromagnet with Continuous Self-Dual Quenched Disorders

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**Abstract:** We present our Monte Carlo results of the random-bond Potts ferromagnet with the Olson-Young self-dual distribution of quenched disorders in two dimensions. By exploring the short-time scaling dynamics, we find the universal power-law critical behavior of the magnetization and Binder cumulant at the critical point, and thus obtain estimates of the dynamic exponent  $z$  and magnetic exponent  $\eta$ , as well as the exponent  $\theta$ . Our special attention is paid to the dynamic process for the  $q=8$  Potts model.

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Key words: short-time dynamics, random-bond Potts model, Monte Carlo simulation

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