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Random Field Ising Model In and Out of Equilibrium YANG LIU, KARIN DAHMEN, Department of Physics, University of Illinois at Urbana-Champaign, Urbana, IL 61801, USA — We present numerical studies of zero-temperature Gaussian random-field Ising model (zt-GRFIM) in both equilibrium and non-equilibrium. We compare the no-passing rule, mean-field exponents and universal quantities in 3D (avalanche critical exponents, fractal dimensions, scaling functions and anisotropy measures) for the equilibrium and non-equilibrium disorder-induced phase transitions. We show compelling evidence that the two transitions belong to the same universality class.

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