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Aging processes in systems with anomalous slow dynamics¹ NAS-RIN AFZAL, MICHEL PLEIMLING, Virginia Tech — Recent studies of coarsening in disordered systems show a crossover from an initial, transient, power-law domain growth to a slower logarithmic growth. Due to the anomalous slow dynamics, numerical simulations are usually not able to fully enter the asymptotic regime when investigating the relaxation of these systems toward equilibrium. In order to gain some new insights into the non-equilibrium properties of systems with logarithmic growth, we study two simple driven systems, the one-dimensional ABC-model and a related domain model with simplified dynamics, where the asymptotic regime can be accessed. Studying two-times correlation and response functions, we focus on aging processes and dynamical scaling during logarithmic growth.

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