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Nonuniversal Effects in Mixing Correlation-Growth Processes with Randomness ALICE KOLAKOWSKA, Valdosta State University, GA — In mixed-growth dynamical process $P = Y \vee X$ there are two dynamical processes: Y (in one universality class) and X (in another universality class). They *alternate* with each other: "*exclusively either* Y (is active with probability q) *or* X (is active with probability p)," $p + q = 1$. When P models surface growth via deposition/desorption/adsorption with X building universal correlations and Y representing randomness (e. g., thermal effects), in order to correctly construct a continuum growth equation for P a distinction must be made *within a single universality class* of X between processes that do and do not create voids in the bulk of deposited material. Then, model-dependent prefactors in universal scaling of the surface roughness can be linked with the bulk morphology and determined from the bulk structures. This connection is essential to finding correct dynamical scaling and to interpretation of scaling laws for mixed-growth dynamical processes.

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