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Growth Inside a Corner: Limiting Interface Shape JASON OLEJARZ, PAUL KRAPIVSKY, SIDNEY REDNER, Boston University, KIRONE MALLICK, CEA Saclay, France — We investigate a simple model for crystal growth in which elemental cubes are stochastically deposited onto the inside of a three-dimensional corner. The interface of this crystal evolves into a deterministic limiting shape in the long-time limit. We incorporate known results from the corresponding two-dimensional system and use geometrical symmetries of the three-dimensional problem to conjecture an equation of motion for the interface profile which we solve analytically. The agreement between the result of the calculation and simulations of the growth process is excellent. We also present a generalization of our equation of interface motion to arbitrary spatial dimension.

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