

Probability Seminar

Organizer: Tai Melcher & George Kordzakhia

Wednesday, 3:10–4:00pm, 330 Evans

Apr 19 **Janko Gravner**, UC Davis

Digital snowflakes

We will discuss several mathematical models of snow crystal growth. For a popular class of cellular automata known as Packard's Snowflake, one can develop a fairly complete rigorous theory, addressing limiting density, fractal shapes and exact solvability. The bulk of this theory is limited to the deterministic cases, although something can be said about random perturbations. The talk will also address a more realistic mesoscopic snowflake model, which offers some hope of at least empirical analysis. This talk will be accessible to most undergraduates and is on joint work with David Griffeath (Univ. of Wisconsin).