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Critical exponents in the presence of a tip MOHAMMAD F. MAGHREBI, MIT, YACOV KANTOR, Tel Aviv University, MEHRAN KARDAR, MIT — The behavior of Landau-Ginzburg model of a critical system, appropriate to describe SAW polymers, in the presence of a conical boundary is studied within mean field and by epsilon expansion in d=4-epsilon dimensions. New exponents emerge for correlation functions near the boundaries, in this case the tip of the cone. In the limit of a sharp cone we find a new exponent which we interpret for a SAW polymer by using its fractal dimension.

Mohammad F. Maghrebi
MIT

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