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Abstract: Taking advantage of the determinantal or Pfaffian form of correlations of certain integrable 2D lattice models (such as the Ising model) makes it possible to represent classes of related non-solvable models in terms of Grassmann integrals, which can be studied using techniques developed for Fermionic quantum field theory to provide a robust description of the large-scale behaviour of these systems near their critical point. I will illustrate this in the context of the Ising model on a discrete torus or cylinder, where the asymptotic form (scaling limit) of some of the correlation functions has been shown to be unchanged (up to a reparameterization) under a variety of modifications of the Hamiltonian. (19:55 - 20:15)