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Talk: Factorization of density matrices for the critical RSOS models

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Local operators in interaction round a face models can be expressed in terms of generalized transfer matrices. We use the properties of the local Boltzmann weights to derive discrete functional equations of reduced q-Knizhnik-Zamolodchikov type satisfied by the reduced density matrices for a sequence of consecutive sites in inhomogeneous

generalizations of these models. For the critical restricted solid-on-solid (RSOS) models we find that these density matrices can be 'factorized'in certain topological sectors, i.e. expressed in terms of a single nearest-neighbour correlator. The coefficients in such an expansion are independent of model parameters such as system size and inhomogeneities. Determining these coefficients we obtain explicit expressions for multipoint local height probalities.

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