



Mathematical Physics

The monodromy matrix in the F-basis for arbitrary six-vertex models

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We present the expressions for the monodromy matrix elements of the six-vertex model in the F-basis for arbitrary Boltzmann weights. The results rely solely on the property of unitarity and Yang-Baxter relations, avoiding any specific parameterization of the weights. This allows us to write complete algebraic expressions for the inner products and the underlying domain wall partition functions in the case of arbitrary rapidities. We then apply our results for the trigonometric six-vertex model in the presence of inhomogeneous electric fields and obtain a determinant formula for the respective on-shell scalar products.

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