

Yang–Baxter relations with orthogonal and symplectic symmetries

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Only for a special class of representations the Yang–Baxter RLL relation with the fundamental R matrix can be fulfilled by L matrices linear in the spectral parameter. In the orthogonal case these are the spinorial representations. They have infinite-dimensional counterparts in the symplectic case. We describe the symplectic spinorial representations, their L matrices and the R operators intertwining tensor products of such representations. The results are based on the collaboration with David Karakhanyan.