

Yangian deformations of S-commutative quantum vertex algebras

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We present the construction of a new class of quantum vertex algebras associated with a normalized Yang R -matrix. They are obtained as Yangian deformations of certain S-commutative quantum vertex algebras and their S-locality takes the form of a single RTT -relation. We establish some preliminary results on their representation theory and then further investigate their braiding map. These results were obtained jointly with Slaven Kožić. Then we will mention a recent generalization of these results to the case of the type A trigonometric R -matrix and the elliptic R -matrix of the eight-vertex model. These results were obtained jointly with Marijana Butorac and Slaven Kožić.

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