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# Hopf25

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Radboud, Netherlands

Parallel sessions, Forum F

Friday, April 25, 2025

15h-15h25

**Symmetries for spherical functions of type  $\chi$  for quantum symmetric pairs**

Let  $\mathfrak{g}$  be a complex semisimple Lie algebra and let  $U_q(\mathfrak{g})$  denote the associated Drinfel'd Jimbo quantized enveloping algebra. We are interested in spherical functions related to quantum symmetric pairs. Gail Letzter provides quantum group analogs of quantum symmetric pairs in terms of a one-sided coideal subalgebras. The spherical functions related to characters turn out to be invariant under an action of the relative braid group, which extends Letzter's result for the trivial character. We show this invariance using the Wang-Zhang braid group operators and an explicit realization of the spherical functions.