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Title: R-matrices from braided Hopf algebras with automorphisms.

Abstract: Given a braided Hopf algebra endowed with an automorphism, one can construct an R-matrix over the underlying vector space of this braided Hopf algebra. In the case of Nichols algebras, we obtain R-matrices which lead to multivariable knot polynomials generalising those related to Borel parts of small quantum groups. In the case of a generic Nichols algebra of rank 1, which is a polynomial algebra of one indeterminate, our construction reproduces the sequence of R-matrices underlying the coloured Jones polynomials. This is a joint work with Stavros Garoufalidis.