1012-16-215 Hans Wenzl* (hwenzl@ucsd.edu), Dept of Mathematics, UCSD, La Jolla, CA 92014. Generalized Schur Duality for Quantum Groups.

It has been known for some time that for the analogue V of the vector representation for quantum groups of classical Lie types the braid group generates the commutant of the action of the quantum group on tensor powers of V. This is generalized to spinor representations, where one has to make some well-known modifications for type D; this was already necessary for the vector representation.

This statement is not true for exceptional Lie groups. However, it is still true for the minuscule representations for type E_6 and E_7 in a weaker sense, and may well be true for suitable representations of all exceptional groups. (Received September 20, 2005)