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Jonathan Scott Brown* (brownjs@for.mat.bham.ac.uk). *Changing highest weight theories for finite W -algebras.*

A highest weight theory for a finite W -algebra $U(\mathfrak{g}, e)$ was developed by Brundan, Goodwin, and Kleshchev. This leads to a strategy for classifying the irreducible finite dimensional $U(\mathfrak{g}, e)$ -modules. The highest weight theory depends on the choice of a parabolic subalgebra of \mathfrak{g} leading to different parameterizations of the finite dimensional irreducible $U(\mathfrak{g}, e)$ -modules. We explain how to construct an isomorphism preserving bijection between the parameterizing sets for different choices of parabolic subalgebra when \mathfrak{g} is of type A, or when \mathfrak{g} is of types C or D and e is an even multiplicity nilpotent element. (Received July 28, 2011)