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Thomas Folz-Donahue and **Steven Glenn Jackson*** (jackson@math.umb.edu), Department of Mathematics, University of Massachusetts, 100 Morrissey Boulevard, Boston, MA 02125, and **Todor Milev** and **Alfred G. Noel**. *Sign signatures and characters of Weyl groups*. Preliminary report.

Let W be a Weyl group, and let V be a representation of W . The *sign signature* of V is the set of all parabolic subgroups of W admitting a sign character on V . The sign signature is closely related to the *tau invariant* studied in the context of W -graphs and the Springer correspondence.

We discuss the parametrization of representations by sign signatures. When W is of classical type, irreducible representations are completely determined by their sign signatures, and we give a combinatorial recipe that recovers the partition or partition pair associated with a given representation from its sign signature. (Received July 14, 2016)