1056-05-476 **W. Andrew Pruett*** (drew_pruett@baylor.edu), 2114 Rawhide Trail, Temple, TX 76502. Projections of Ocneanu traces are Kazhdan-Lusztig R-polynomials.

We generalize Deodhar's concept of distinguished subexpressions to Artin's braid group, and show that the resulting notion of R-polynomial is well-defined, and is a projection of the Ocneanu trace. This gives a novel algorithm to compute R-polynomials over intervals in symmetric groups, and a natural generalization of the Ocneanu trace to arbitrary Weyl groups. (Received September 09, 2009)