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**Michael S Chmutov\*** (mchmutov@umn.edu), **Pavlo Pylyavskyy** and **Elena Yudovina**. *Matrix ball construction for affine Robinson-Schensted correspondence.*

In his study of Kazhdan-Lusztig cells in affine type  $A$ , Shi has introduced an affine analog of Robinson-Schensted correspondence. We generalize the Matrix-Ball Construction of Viennot and Fulton to give a more combinatorial realization of Shi's algorithm. As a byproduct, we also give a way to realize the affine correspondence via the usual Robinson-Schensted bumping algorithm. Next, inspired by Honeywill, we extend the algorithm to a bijection between the extended affine symmetric group and collection of triples  $(P, Q, \rho)$  where  $P$  and  $Q$  are tabloids and  $\rho$  is a dominant weight. (Received February 23, 2016)