1125-20-2538 **Pramod N. Achar**, **Maitreyee Kulkarni** and **Jacob P. Matherne***
(matherne@math.umass.edu). *A combinatorial Fourier transform for quiver representation varieties in type A.* Preliminary report.

For a given dimension vector, we consider the space of representations of the linearly-oriented type A quiver $\bullet \longrightarrow \bullet \longrightarrow \cdots \longrightarrow \bullet$. This affine space has a stratification by orbits for a product of general linear groups, so we can study the equivariant constructible derived category of sheaves on it. The Fourier–Sato transform gives an equivalence between this derived category and the derived category for the reversed quiver. We give a combinatorial algorithm for computing the Fourier–Sato transform in this setting by introducing certain triangular arrays of nonnegative integers. This is joint (in progress) work with Pramod N. Achar and Maitreyee Kulkarni. (Received September 20, 2016)