1145-57-2055 **David Freund*** (dfreund@math.harvard.edu). *Singular Based Matrices for Virtual 2-Strings.* Preliminary report.

A singular virtual 2-string α is a wedge of two circles on a closed oriented surface. Up to equivalence by virtual homotopy, α can be realized on a canonical surface Σ_α. We use the homological intersection pairing on Σ_α to associate an algebraic object to α called a singular based matrix. We show that singular based matrices can be used to distinguish virtual homotopy classes of 2-strings and compute the virtual Andersen–Mattes–Reshetikhin bracket. (Received September 24, 2018)