Given a skew partition $\lambda/\mu$, the dual stable Grothendieck polynomial corresponding to it is a formal power series in infinitely many commuting variables $x_1, x_2, x_3, \ldots$; it is defined as the sum of $x^{\text{ircont}}_T$ over all reverse plane partitions $T$ of shape $\lambda/\mu$. Here, $\text{ircont}_T$ denotes the integer sequence whose $i$-th term is the number of columns of $T$ which contain the entry $i$, and $x^\alpha$ denotes the monomial $x_1^{\alpha_1}x_2^{\alpha_2}x_3^{\alpha_3}\cdots$ (in commuting variables) for any sequence $\alpha = (\alpha_1, \alpha_2, \alpha_3, \ldots)$ of nonnegative integers. Lam and Pylyavskyy have shown that this dual stable Grothendieck polynomial is a symmetric function, whose highest homogeneous component is the Schur function $s_{\lambda/\mu}$.

In a paper that is to appear on the arXiv soon, Pavel Galashin, Gaku Liu and I have obtained a multiparameter generalization of this construction, which also generalizes the Schur functions. We have proven that our generalized functions are still symmetric, and obey a version of the Littlewood-Richardson rule. We furthermore conjecture a generalized version of the Jacobi-Trudi identity exhibiting a surprising symmetry. (Received August 06, 2015)