Horizontal-strip LLT polynomials

Lascoux, Leclerc, and Thibon defined a remarkable family of symmetric functions that are $q$-deformations of products of skew Schur functions. These LLT polynomials $G_\lambda(x; q)$ can be indexed by a tuple $\lambda$ of skew diagrams. When each skew diagram is a row, we define a weighted graph $\Pi(\lambda)$. We show that a horizontal-strip LLT polynomial is determined by this weighted graph. When $\Pi(\lambda)$ has no triangles, we establish a combinatorial Schur expansion of $G_\lambda(x; q)$. We also explore a connection to extended chromatic symmetric functions.