1071-57-47 Hao Wu* (haowu@gwu.edu). Colored Morton-Franks-Williams inequalities.

We generalize the Morton-Franks-Williams inequality to the colored $\mathfrak{sl}(N)$ link homology, which gives infinitely many new bounds for the braid index and the self linking number. A key ingredient of our proof is a composition product for the general MOY graph polynomial, which generalizes that of Wagner. (Received February 02, 2011)