1030-16-288 **Peter C Schauenburg*** (schauenburg@math.lmu.de), Theresienstr. 39, 80796 München, Germany, and Siu-Hung Ng. Higher Frobenius-Schur indicators for fusion categories and quasi-Hopf algebras.

Frobenius-Schur indicators for the representations of finite groups were invented a century ago to decide whether a given representation is real. Higher indicators, though their interpretation is less straightforward, are also an old subject in the theory of group representations. We treat higher indicators for certain fusion categories, and in particular semisimple quasi-Hopf algebras. These are designed to generalize their predecessors for the group and Hopf algebra case. We discuss the definition and equivalent characterization, important properties (most notably higher indicators are categorical invariants), and some examples. (Received August 06, 2007)