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Title: Link invariants from Turaev-Viro state sums.

Abstract: We consider certain invariants of links in 3-manifolds obtained by a specialization of Turaev-Viro invariants of 3-manifolds. The specialization is based on presentations of pairs (M, L) , where M is a closed oriented 3-manifold and $L \subset M$ is an oriented link, by triangulations of M such that L is a subset of the 1-skeleton. We consider some elementary properties of the invariants, including the behavior under the connected sums of pairs away and along links. These properties allow one to provide examples of links in the 3-sphere which have the same HOMFLY polynomial and the same Kauffman polynomial but distinct Turaev-Viro invariants (similar examples can be provided for the Alexander polynomial). We also provide examples of some specific calculations, in particular, we determine the values of Turaev-Viro invariants of order 5 for all torus knots. (Joint work with Carlo Petronio).