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Title: Signatures of Links (and How to Compute them)

Abstract: The Levine-Tristram signature of a link is a classical invariant with many definitions and applications – it is closely related to the Alexander polynomial, provides lower bounds on topological invariants such as the slice and doubly slice genus, and is almost-everywhere a concordance invariant. In 2018 Kashaev introduced a link invariant using a simple algorithm on link diagrams which he conjectured also computes the Levine-Tristram signature. I will give a proof of Kashaev's conjecture using the original Seifert surface definition of the Levine-Tristram signature. The proof also gives another way of computing the Alexander polynomial.