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Title: Diagnosing positivity in links. Any Doctor in the room?

Abstract: When studying knots (or, more generally, links), it is often useful to group them into families based on shared properties. One standard method is to declare that a knot belongs to a particular family if it admits a diagram satisfying certain conditions. This is the case for the various notions of positivity for links (positive links, braid-positive links, quasipositive links, etc.). The definitions of these families (namely the constraints placed on their diagrams) are motivated by the contexts in which they arise. Moreover, several invariants display distinctive behaviours when considered within these specific families.

In this talk, we examine the principal notions of positivity for knots and links, together with the connections among them. We will emphasize some key properties that are reflected in several well-known link invariants. The presentation is intended to be mostly self-contained, and several examples will be included to illustrate the definitions and main results.