Geometric Constraints in Link Isotopy

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In classical knot theory, an unlink consists of unknotted, pairwise unlinked components that, no matter how tangled, can always be separated by isotopy. However, under geometric constraints such as fixed length and thickness, it has been conjectured that there exist unlinks that resist such separation. In this talk, I will present the first examples of such unlinks, called gordian unlinks, and outline the construction of infinite families of these objects, each admitting at least two unknotted unlinked components. This is joint work with Joel Hass.

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