▶ ALEX KRUCKMAN, *Kim's lemmas and tree properties.*
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One of the most important technical steps in the development of simplicity theory in the 1990s was a result now known as Kim's Lemma: In a simple theory, if a formula $\varphi(x;b)$ divides over a model M, then $\varphi(x;b)$ divides along every Morley sequence in $\mathrm{tp}(b/M)$. More recently, variants of Kim's Lemma have been shown by Chernikov, Kaplan, and Ramsey to follow from, and in fact characterize, two generalizations of simplicity in different directions: the combinatorial dividing lines NTP_2 and NSOP_1. After surveying the Kim's Lemmas of the past, I will suggest a new variant of Kim's Lemma, and a corresponding new model-theoretic tree property, which generalizes both TP_2 and SOP_1. I will also compare this new tree property with the Antichain Tree Property (ATP), another tree property generalizing both TP_2 and SOP_1, which was introduced recently by Ahn and Kim. This is joint work with Nick Ramsey.