

Tangential connection

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Let $X \subset P^N$ be a smooth variety. The embedding in P^N gives naturally rise to the notion of embedded tangent spaces. That is the locus spanned by tangent lines to a point $x \in X$. Generally the embedded tangent space intersects the variety X only at the point x . In this talk I am interested in those X for which this intersection, for $x \in X$ general, is a positive dimensional subvariety. The results support the conjecture that these varieties are built out of some special varieties that I call Tangentially Connected.