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Co-tangency sets and a configuration theorem

In the projective plane $W$ over a field $F$ let $S$ be a set of points. Assume also that there is a 1-1 [injective] mapping $f$ from $S$ into the lines of $W$ satisfying the following two properties.

A. For $P$ in $S$, $f(P)$ does not contain $P$.

B. If $P$, $Q$ are distinct points of $S$, then the points $P$, $Q$ and $R$ [which is the intersection of $f(P)$ with $f(Q)$] are collinear. Then $S$ is called a CO-TANGENCY set in $W$.

In this lecture we present a structural result for co-tangency sets. Following this we present some applications including a classical result due initially to M. O. Nan.