

# On varieties determined by their jets

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Let  $X$  be an algebraic variety and let  $Y$  be a subvariety. Denote by  $\hat{X}$  be the infinitesimal neighborhood of  $Y$  in  $X$ . We show that, under strong hypotheses,  $\hat{X}$  determines  $X$ . Then the statement can be used in Invariant Theory.