pf). For example, assume V has dimension 2 in $\mathbb{P}^n$. $\Rightarrow$ As in the proof of Stokes' Theorem for Analytic Varieties, P33, let V_1 be the singular locus of V, V_2 the singular locus of V_1 ... and so on. $\Rightarrow$ $V^* = V - V_1$ $V_1^* = V_1 - V_2$ ... $V_2^* = V_2 - V_3$

Assume $\dim V_1^* = 1$, $\dim V_2^* = 0$

$\Rightarrow$ V_2^* is a set of discrete points.

$V_3^* = \phi$.

$\Rightarrow$ $\{H \subset \mathbb{P}^n \mid H$ hyperplane, $H \cap V_2^* \} = A_2$ is open and dense in $G(n-1, n)$.

$\Rightarrow$ $\{H \subset \mathbb{P}^n \mid H$ hyperplane. $H \cap V_1^*$ = a set of discrete points, and H meets V_1^* transversely $\} = A_1$ is open and dense in $G(n-1, n)$. by Bertini Theorem

$\Rightarrow$ $\{H \subset \mathbb{P}^n \mid H$ hyperplane H meets V^* transversely$\}$ $= A_0$ is open and dense in $G(n-1, n)$, by Bertini.

$\Rightarrow$ $A_0 \cap A_1 \cap A_2$ is open and dense in $G(n-1, n)$.

$\Rightarrow$ For a generic hyperplane H. $H \cap V^* = (H \cap V)^*$ (mod 0-dimensional variety). More precisely,

$H \cap V^*$ = smooth one-dimensional manifold

and $(H \cap V)^* - (H \cap V^*)$ = set of discrete points.

$\Rightarrow$ By using the argument above, for a generic hyperplane H, $H \cap V^* \cap H$ is a smooth 0-dimensional manifold & $H \cap H$ meets V^* transversely. Note that $H \cap H$ does not intersect V_1, i.e., "a generic $\mathbb{P}^2$ intersect V^* transversely without meeting V_1."