1083-14-173 Hal Schenck* (schenck@math.uiuc.edu), 1409 W. Green St, Urbana, IL 61801, and Hiroaki Terao and Masahiko Yoshinaga. Logarithmic vector fields and curve configurations.

Let $\mathcal{A} = \bigcup_{i=1}^{r} C_i \subseteq \mathbb{P}^2$ be a collection of smooth plane curves, such that each singular point is quasihomogeneous. We prove that if C is a smooth curve such that each singular point of $\mathcal{A} \cup C$ is also quasihomogeneous, then there is an elementary modification of rank two bundles, which relates the $\mathcal{O}_{\mathbb{P}^2}$ -module of vector fields on \mathbb{P}^2 tangent to \mathcal{A} to the module of vector fields tangent to $\mathcal{A} \cup C$. This yields an inductive tool for studying the splitting of these bundles, depending on the geometry of the divisor $\mathcal{A}|_C$ on C. (Received August 27, 2012)