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**Youngsu Kim\*** (yk009@uark.edu), 850 W Dickson ST, Fayetteville, AR 72701, and **Lance Edward Miller** and **Wenbo Niu**. *The generic link of a determinantal variety.*

We study singularities of the generic link of a determinantal variety. Let  $A := \mathbb{A}_{\mathbb{C}}^n$ , and let  $X$  and  $Y$  be equidimensional subschemes of  $A$ . We say that  $X$  and  $Y$  are *linked* via  $V$  if there exists a complete intersection  $V$  in  $A$  such that  $\mathcal{I}_Y/\mathcal{I}_V \cong \text{Hom}_{\mathcal{O}_A}(\mathcal{O}_X, \mathcal{O}_V)$  and  $\mathcal{I}_X/\mathcal{I}_V \cong \text{Hom}_{\mathcal{O}_A}(\mathcal{O}_Y, \mathcal{O}_V)$ .

Two linked subschemes have many properties in common, and it is believed that the generic link of a variety improves singularities of the variety. Let  $X$  be a variety and  $Y$  the generic link of  $X$ . Recently, W. Niu showed that the log canonical threshold,  $\text{lct}$  for short, “improves” under taking the generic link, i.e.,  $\text{lct } Y \geq \text{lct } X$ . It is not known if equality holds in general. In this talk, we show that in the case where  $X$  is a determinantal variety, then  $\text{lct } X = \text{lct } Y$ . This is joint work with Wenbo Niu and Lance Miller. (Received September 01, 2018)