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**Hugh Roberts Geller\*** (hgeller@g.clemson.edu). *Explicit Minimal Free Resolutions of Fiber Products*. Preliminary report.

In 2006, Visscher gave an explicit construction for the minimal free resolution of the fiber product  $k[\underline{x}] \times_k k[\underline{y}]$  over  $k[\underline{x}, \underline{y}]$  where  $k$  is a field and  $\underline{x}$  and  $\underline{y}$  are distinct lists of variables. In this talk, we use a rephrasing of this construction along with the minimal free resolutions of  $k[\underline{x}]/\mathcal{I}$  and  $k[\underline{y}]/\mathcal{J}$ , where  $\mathcal{I} \subseteq \langle \underline{x} \rangle^2$  and  $\mathcal{J} \subseteq \langle \underline{y} \rangle^2$ , to obtain a minimal free resolution of  $k[\underline{x}]/\mathcal{I} \times_k k[\underline{y}]/\mathcal{J}$ . (Received January 17, 2021)