1163-13-1102 **Hugh R. Geller*** (hgeller@clemson.edu). *DG-Structures on Minimal Free Resolutions of Fiber Products.* Preliminary report.

A construction of Tate shows that every algebra over a ring R possess a DG-algebra resolution over R. These resolutions are not always minimal and Avramov even shows that certain algebras cannot have a minimal resolution with a DG-algebra structure. In this talk, I give an explicit construction of the minimal resolution of the fiber product $k[\underline{x}]/\mathcal{I} \times_k k[\underline{y}]/\mathcal{J}$ over $k[\underline{x}, \underline{y}]$ where $\mathcal{I} \subseteq \langle \underline{x} \rangle^2$ and $\mathcal{J} \subseteq \langle \underline{y} \rangle^2$. I then show how to put a DG-structure on these resolutions. (Received September 14, 2020)