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**Jason Gaddis\*** (gaddisj@miamioh.edu) and **S. Paul Smith**. *A birational equivalence between non-commutative analogs of  $\mathbb{P}^2$  and  $\mathbb{P}^1 \times \mathbb{P}^1$ .* Preliminary report.

An example that appears in every introductory course on projective algebraic geometry consists of blowing up a pair of distinct points on the projective plane  $\mathbb{P}^2$  then contracting the strict transform of the line through them to obtain a surface isomorphic to  $\mathbb{P}^1 \times \mathbb{P}^1$ . In this talk, I will present a non-commutative analog of this construction. A particularly interesting special case is related to the Lie algebra  $\mathfrak{sl}_2$ . (Received June 24, 2017)