

1154-46-1901      **Danny W Crytser\*** ([dannycrytser@gmail.com](mailto:dannycrytser@gmail.com)), 118 Valentine Hall, Dept Math - SLU, Canton, NY 13617. *Pure extension property for étale groupoid crossed product  $C^*$ -algebras.* Preliminary report.

We analyze the pure extension property (PEP) for crossed products of unital  $C^*$ -algebra by locally compact Hausdorff étale groupoids. We show that if  $\mathcal{G}$  is such a groupoid and  $A$  is a  $\mathcal{G}$ - $C^*$ -algebra, then the inclusion  $A \subset A \rtimes_r \mathcal{G}$  has the PEP exactly when the action of  $\mathcal{G}$  on the spectrum  $\widehat{A}$  is free. This extends previous work of Zarikian on crossed products by discrete groups. (Received September 16, 2019)