1090-46-66   **Jonathan Henry Brown*** (`brownjh@ksu.edu`). *Simplicity of etale groupoid C*-algebras.*

In 1980, Renault showed that if a locally compact Hausdorff etale groupoid is topologically principal and minimal then the groupoid C*-algebra is simple. In this talk I present the converse of this result which was obtained in a recent paper with Lisa Clark, Cynthia Farthing and Aidan Sims. Our result generalizes the characterizations of simplicity for graph C*-algebras, k-graph C*-algebras and discrete transformation groups. We improve on the characterization of simplicity of Exel crossed products associated to covering maps of compact spaces obtained by Exel and Vershik. (Received February 12, 2013)