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**Jack Spielberg\*** (jack.spielberg@asu.edu), **Xin Li**, **Tron Omland**, **David Pask** and **Adam Sorensen**. *Semigroup  $C^*$ -algebras from permutations*. Preliminary report.

Let  $f$  be a permutation of a set  $S$ , and define a semigroup by the presentation  $\langle S \mid af(a) = bf(b) \text{ for } a, b \in S \rangle^+$ . One can show that this semigroup is left cancellative, and therefore one can construct from it an ample étale groupoid. We will describe the structure of these groupoids and their  $C^*$ -algebras, including  $K$ -theory calculations. This is joint work with Xin Li, Tron Omland, David Pask, and Adam Sørensen. (Received August 25, 2018)