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Emily Barnard, Andrew T Carroll* (andrew.carroll@depaul.edu), **Gordana Todorov** and **Shijie Zhu**. *Minimal inclusions of torsion classes*.

We investigate the lattice of torsion classes over a finite-dimensional associative algebra (viewed as a set ordered by inclusion). We start by showing that each cover in this lattice can be encoded by an indecomposable module over the algebra. We then show that there is a one-to-one correspondence between completely join-irreducible torsion classes in this lattice and indecomposable Schur modules over the algebra. In case the algebra is of finite representation type, this correspondence can be leveraged to describe the canonical join representation of any torsion class. In arbitrary representation type, it can be used to describe the canonical join representation of any torsion class that covers at least two other torsion classes. (Received August 30, 2016)