# 4-TORSION PART OF THE BRAUER GROUP

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Abstract. For a positive integer $n$, it is an old problem, essentially due to A. A. Albert, whether the $n$-torsion part of the Brauer group of a field $F$ is generated by classes of (cyclic) algebras of degree dividing $n$ ([1, p.126]). In this talk, we provide an affirmative answer to this problem for $n = 4$, also when $\operatorname{char} F \neq 2$ and $\sqrt{-1} \notin F$.

This is a joint work with K. J. Becher.

## References

[1] A. A. Albert. Simple algebras of degree $p^e$ over a centrum of characteristic $p$. Trans. Amer. Math. Soc. 40 (1936), no. 1, 112–126.