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Eoin Mackall* (eoinmackall@gmail.com), 4176 Campus Dr, William E. Kirwan Hall, College Park, MD 20742. *Curves on Severi–Brauer varieties and nontriviality of reduced Whitehead groups.*

Suslin’s conjecture on the reduced Whitehead group predicts that central simple algebras of index divisible by the square of a prime have generically nontrivial reduced Whitehead groups (i.e. even if these groups are trivial over the base field, there is some field extension where the reduced Whitehead group of the base-changed algebra is nontrivial). For algebras having index divisible by 4, Suslin’s conjecture is known to hold by work of Merkurjev. More generally, Merkurjev has shown that Suslin’s conjecture holds under the assumption that the Chow groups of some low dimensional cycles on a Severi–Brauer variety are torsion free. In this talk, we consider the next nontrivial case of Suslin’s conjecture (for algebras with index divisible by 9), and relate the torsionfree-ness of these Chow groups to the existence of a family of curves on certain Severi–Brauer varieties. (Received September 12, 2020)