Skip Garibaldi* (skip@mathcs.emory.edu), Dept. of Math & Computer Science, 400 Dowman Dr., Atlanta, GA 30322. Kneser-Tits Conjecture and outer forms of $E_6$.

The (false) Kneser-Tits Conjecture connects simplicity of an isotropic algebraic group with the simplicity of its abstract group of rational points. The Tannaka-Artin Problem (i.e., find division algebras with nonzero reduced Whitehead group) essentially asks for counterexamples to this conjecture. We discuss the status of the conjecture for groups of outer type $E_6$, the only type for which the conjecture is open over number fields. It turns out that both more and fewer cases are known than is popularly believed. (Received September 27, 2005)