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**Ben Williams\*** ([benedict.williams@gmail.com](mailto:benedict.williams@gmail.com)). *The  $A^1$  calculation of the 4th homotopy group of the 6,3-sphere and a conjecture of Suslin.*

The algebraic  $K$ -theory, due to Quillen, of a field is related to a theory defined by Milnor called Milnor  $K$ -theory and denoted  $K^M$ . In the 1980s, Andrei Suslin constructed a map  $K_n(F) \rightarrow K_n^M(F)$ , and conjectured that the image was the subgroup  $(n-1)!K_n^M(F)$ . He also proved the conjecture for  $n \leq 3$ . For  $n = 5$ , we reinterpret the construction as a construction in the  $A^1$  homotopy groups of spheres and  $BGL$ , and by calculating these groups, show that the conjecture is true in this case as well. This represents part of a joint project with Aravind Asok, Jean Fasel and Kirsten Wickelgren. (Received September 07, 2017)