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T Benedict Williams* (tbjw@math.ubc.ca), 1984 Mathematics Road, Vancouver, BC V6T1Z2, Canada. *Suslin's Conjecture and the motivic homotopy of GL_n* . Preliminary report.

The (Quillen) K theory of a field appears as the motivic homotopy groups of GL_n , whereas the Milnor K theory appears as a quotient of a stabilization map in the homology of GL_n . The two are therefore related by a Hurewicz map, first constructed by Suslin in 1983. He conjectured that the image of this Hurewicz map should be the subgroup generated by $(n - 1)!$ in degree n . This conjecture was previously known to hold for $n \leq 3$. In this talk, I will give a view of this conjecture entirely within motivic homotopy theory, and exploiting stable calculations by Röndigs, Spitzweck and Østvær, along with some extraordinary isomorphisms, show the conjecture in the case $n = 5$. The cases $n = 4$ and $n \geq 6$ remain open.

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