1077-14-1010   **Caroline Junkins*** (`cjunk084@uottawa.ca`), Department of Mathematics and Statistics, University of Ottawa, 585 King Edward, ON K1N 6N5. *The J-invariant and Tits indices for groups of type E_6.*

A connection between the indices of the Tits algebras of a split linear algebraic group G and the degree one parameters of its motivic J-invariant was introduced by Quéguiner-Mathieu, Semenov and Zainoulline through use of the second Chern class map in the Riemann-Roch theorem without denominators. We extend their result to higher Chern class maps and provide applications to groups of inner type E_6. (Received September 15, 2011)