

1151-55-184

Carmen Rovi* (crovi@mathi.uni-heidelberg.de), Universität Heidelberg, Mathematikon, Im Neuenheimer Feld 205, 69120 Heidelberg, Germany, and **James F. Davis**, Bloomington, IN.

Davis-Lueck equivariant homology in terms of L-theory.

The K -theory $K_n(\mathbb{Z}G)$ and quadratic L -theory $L_n(\mathbb{Z}G)$ functors provide information about the algebraic and geometric topology of a smooth manifold X with fundamental group $G = \pi_1(X, x_0)$. Both K - and L -theory are difficult to compute in general and assembly maps give important information about these functors. Ranicki and Weiss developed a combinatorial version of assembly by describing L -theory over additive bordism categories indexed over simplicial complexes. In this talk, I will present current work with Jim Davis where we define an equivariant version of Ranicki's local / global assembly map and identify our local / global assembly map with the map on equivariant homology defined by Davis and Lueck. I will also mention some applications of our results. (Received August 18, 2019)