

Grayson, Daniel R.

Adams operations on higher K -theory. (English) Zbl 0776.19001
K-Theory 6, No. 2, 97-111 (1992).

Let \mathcal{P} be an exact category with suitable notions of tensor product, symmetric product and exterior product. The author constructs combinatorial maps inducing the Adams operations in the higher algebraic K -theory of \mathcal{P} . These maps are one-fold deloopings of the maps which can be constructed by using lambda operations.

Reviewer: [R.J.Steiner \(Glasgow\)](#)

MSC:

[19D23](#) Symmetric monoidal categories
[19L10](#) Riemann-Roch theorems, Chern characters

Cited in **2** Reviews
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Keywords:

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References:

- [1] Bass, H.: Algebraic K-theory, W. A. Benjamin, New York.
- [2] Dold and Puppe: Ann. Inst Fourier 11 (1961), 201–312.
- [3] Gillet, H. and Grayson, D.: On the loop space of the \mathbb{Q} -construction, Illinois J. Math. 31 (1987), 574–597. · [Zbl 0628.55011](#)
- [4] Gillet, H. and Soulé, C.: K -théorie et nullité des multiplicités d'intersection, C. R. Acad. Sci. Paris 300 (1985), 71–74. · [Zbl 0587.13007](#)
- [5] Grayson, D.: Exterior power operations on algebraic K -theory, *K-Theory* 3 (1989), 247–260. · [Zbl 0701.18007](#) · [doi:10.1007/BF00533371](#)
- [6] Grothendieck, A.: Revêtements étales et groupe fondamental, Séminaire de Géométrie Algébrique du Bois-Marie 1960/61, SGA 1, Lecture Notes in Math. 224, Springer, New York, 1971.
- [7] Grothendieck, A.: La théorie des classes de Chern, Bull. Soc. Math. France 86 (1958), 137–154. · [Zbl 0091.33201](#)
- [8] Hiller, H. L.: $\{\lambda\}$ -rings and algebraic K -theory, J. Pure Appl. Algebra 20 (1981), 241–266. · [Zbl 0471.18007](#) · [doi:10.1016/0022-4049\(81\)90062-1](#)
- [9] Kratzer, Ch.: $\{\lambda\}$ -Structure en K -théorie algébrique, Comment. Math. Helv. 55 (1980), 233–254. · [Zbl 0444.18008](#) · [doi:10.1007/BF02566684](#)
- [10] Lecomte, F.: Opérations d'Adams en K -Théorie algébrique, part of her thesis.
- [11] Nenashev, A.: in preparation.
- [12] Paluch, M.: Thesis at University of Illinois at Chicago (1991).
- [13] Schechtmann, V.: K -Theory, Arithmetic, and Geometry, Lecture Notes in Math. 1289, Springer, New York, 1987.
- [14] Waldhausen, F.: Algebraic K -theory of generalized free products, Ann. of Math. 108 (1978), 135–256. · [Zbl 0397.18012](#) · [doi:10.2307/1971165](#)
- [15] Waldhausen, F.: Algebraic and Geometric Topology (Rutgers 1983), Lecture Notes in Math. 1126, Springer, New York, 1985.

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