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Abstracts of Short Communications and Posters

Section:

2. Algebra

1991 MS Classification: 14, 19, 55: q
Soulé, Christophe, CNRS, IHES, France
Filtrations on Higher Algebraic K-theory
Using the theory of simplicial sheaves one can define a lambda-ring structure on higher K-groups of simplicial schemes hence a gamma-filtration F_γ^p of these groups. There exist also the filtration coming from the Brown-Gersten spectral sequence (the algebraic analog of the Atiyah-Hirzebruch spectral sequence) and, in the case of a variety X over a field, the filtration F_{codim}^p by codimension of supports. We compare these filtrations and we get in particular the inclusion

$$F_\gamma^p K_m(X) \in F_{codim}^{p-m} K_m(X).$$

This is joint work with H. Gillet.
Reference: H. Gillet and C. Soulé, Filtrations on Higher Algebraic K-theory, preprint (1984, revised in 1998).