

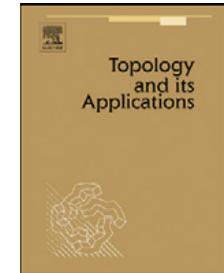


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## New notions in derived categories of local rings

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### ARTICLE INFO

*Article history:*

Received 7 July 2009

Received in revised form 17 December 2009

Accepted 21 December 2009

*MSC:*

primary 18E30

secondary 55U99

*Keywords:*

Derived category

Atomic chain complex

Irreducible chain complex

Minimal atomic chain complex

Nuclear chain complex

Core of chain complex

### ABSTRACT

In the derived category of a local commutative noetherian ring, we define irreducible chain complexes, atomic chain complexes, minimal atomic chain complexes and chain complexes having no mod  $m$  detectable homology. Also, we define nuclear chain complexes and core of chain complexes. After defining these notions, we establish the connection between them.

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