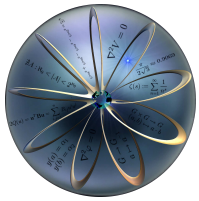

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homological complex of topological vector spaces

Canonical name	HomologicalComplexOfTopologicalVectorSpaces
Date of creation	2013-03-22 18:17:24
Last modified on	2013-03-22 18:17:24
Owner	bci1 (20947)
Last modified by	bci1 (20947)
Numerical id	15
Author	bci1 (20947)
Entry type	Definition
Classification	msc 55N25
Classification	msc 55N99
Classification	msc 55R65
Classification	msc 55P99
Synonym	ChainComplex
Related topic	ChainComplex
Related topic	CategoricalSequence
Related topic	ExactSequence
Related topic	TangentialCauchyRiemannComplexOfCinftySmoothForms
Related topic	HomolgyOfMathbbRP3
Related topic	CohomologicalComplexOfTopologicalVectorSpaces
Related topic	ACRcomplex
Defines	homological complex of topological vector spaces

Definition 0.1. A *homological complex of topological vector spaces* is a pair $(E_\bullet, d)$, where $E_\bullet = (E_q)_{q\in Z}$ is a sequence of topological vector spaces and $d = (d_q)_{q\in Z}$ is a sequence of continuous linear maps d_q from E_{q+1} into E_q which satisfy $d_q \circ d_{q+1} = 0$.

Remarks

- The *homological complex of topological vector spaces* is a specifc example of a *chain complex*.

- A sequence of R-modules and their homomorphisms is said to be a R-complex.