

## MAT9570 pensum (PhD):

*Rognes: Lecture notes on algebraic K-theory*

Chapter 2: Categories and functors

Chapter 3: Transformations and equivalences

Chapter 4: Universal properties

Chapter 5: Homotopy theory

Chapter 6: Simplicial methods

Chapter 7: Homotopy theory of categories

Chapter 8: Waldhausen K-theory

Chapter 9: Abelian and exact categories

*Waldhausen: Algebraic K-theory of spaces*

Section 1.1: Categories with cofibrations ...

Section 1.2: “Waldhausen categories”

Section 1.3: The K-theory of a “Waldhausen category”

Section 1.4: The additivity theorem

Section 1.5: Application of the additivity theorem ...

Appendix 1.9: Relation with the Q-construction

*Quillen: Higher algebraic K-theory: I*

Section 1: The classifying space of a small category

Section 2: The K-groups of an exact category

Section 3: Characteristic exact sequences and filtrations

Section 4: Reduction by resolution

Section 5: Devissage and localization in abelian categories

## Spezialpensum (Master):

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