

MATH-684

Spectral sequences

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Cursus	Sem.	Type
Mathematics		Opt.

Language of teaching	English
Credits	2
Session	
Exam	Oral
Workload	60h
Hours	33
Courses	21
TP	12
Number of positions	

Frequency

Only this year

Remark

Spring semester: Thursdays from March 4th to May 20th, 2021

Summary

The goal of the course is to learn how to construct and calculate with spectral sequences. We will cover the construction and introductory computations of some common and famous spectral sequences.

Content

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Content:

Construction of Spectral Sequences
 Bockstein Spectral Sequence
 Atiyah-Hirzebruch Spectral Sequence
 EHP Spectral Sequence
 Leray-Serre Spectral Sequence

Keywords

Algebraic Topology

Learning Prerequisites**Required courses**

A background knowledge of algebraic topology and homological algebra are assumed

Resources**Bibliography**

Extra chapter on spectral sequences - Hatcher
 Conditionally convergent spectral sequences - Boardman
 Spectral sequences: friend or foe? - Vakil