

MATH-695

Arithmetic of elliptic curves (2019)

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Cursus	Sem.	Type
Mathematics		Obl.

Language of teaching	English
Credits	3
Session	
Exam	Oral presentation
Workload	90h
Hours	42
Courses	24
TP	18
Number of positions	10

Frequency

Only this year

Remark

Next time: Fall 2018

Summary

The arithmetic of elliptic curves is an area of modern number theory which studies properties of points on elliptic curves over various fields. Due to the relative simplicity, this subject has been well studied and many patterns and regularities have been discovered.

Content

The arithmetic of elliptic curves is an area of modern number theory which studies properties of points on elliptic curves over various fields. Due to the relative simplicity, this subject has been well studied and many patterns and regularities have been discovered. A few examples of such statements are: Sato-Tate conjecture, Birch and Swinnerton-Dyer conjecture, Modularity theorem. In this course we plan to discuss basic properties of elliptic curves, recent results, and open conjectures.

Note

This course will take place in a form of a seminar. Each participant is expected to give a talk. The talks will be distributed during the first lecture

Learning Prerequisites**Required courses**

Participants are expected to have basic knowledge in algebra, number theory, and complex analysis.