



Utrecht University, Faculty of Science

Geometry

The summer school on Geometry aims to cover a spectrum of modern geometry as broad as possible, as well as their interaction with neighbouring fields such as logic, Lie and number theory and physics.

Geometry is the theory of space. "Space" is a multi-faceted concept: it refers equally well to the phase space of a classical mechanical system, the differential-geometrical space of general relativity or the operator-theoretic space of quantum mechanics from physics, as to the internet as a huge graph of connections.

The summer school on Geometry, which is organized by the Utrecht Geometry Centre, is designed for advanced undergraduate students with basic knowledge of algebra and topology.

Programme summer school on Geometry

August 15 - August 26, 2016

Week 1

Aug. 15	Dr. Fabian Ziltener
Aug. 16	Dr. Martijn Caspers
Aug. 17	Dr. Jaap van Oosten
Aug. 18	Dr. Bas Janssens
Aug. 19	Dr. Johan van de Leur

Some highlights of symplectic geometry
The geometry of discrete groups
The topology of ordinal numbers
Loop spaces
Grassmannians and representation theory of $GL(n)$

Week 2

Aug. 22	Prof. Gunther Cornelissen
Aug. 23	Dr. Damaris Schindler
Aug. 24	Prof. Ieke Moerdijk, Joost Nuiten M.Sc, Dr. Gijs Heuts
Aug. 25	Prof. Frans Oort
Aug. 26	Prof. Frits Beukers

P-adic numbers
The local-global principle for quadratic forms

Representations of finite groups
Elliptic curves
Diophantine equations

COURSE DIRECTOR:

Dr. Johan van de Leur

PERIOD:

15 August 2016 - 26 August 2016

FEE:

€800 (including housing), scholarships available

CREDITS:

3.0 ECTS

MORE INFORMATION:

www.utrechtsummerschool.nl