UCLouvain

lmat2265

2020

Complex geometry

Due to the COVID-19 crisis, the information below is subject to change, in particular that concerning the teaching mode (presential, distance or in a comodal or hybrid format).

5 credits	30.0 h + 15.0 h	Q2

This biannual learning unit is not being organized in 2020-2021 !

Teacher(s)	Haine Luc ;
Language :	French
Place of the course	Louvain-la-Neuve
Main themes	Compact Riemann surface theory and its applications to integrable systems.
Aims	*The contribution of this Teaching Unit to the development and command of the skills and learning outcomes of the programme(s) can be accessed at the end of this sheet, in the section entitled "Programmes/courses offering this Teaching Unit".*
Evaluation methods	**Due to the COVID-19 crisis, the information in this section is particularly likely to change.** Assessment is made on the basis of an oral presentation during the teaching sessions and an oral examination at the end of the class. The oral presentation during the teaching sessions consists in presenting a chapter in a book, or a research article offering new perspectives. The oral examination at the end of the semester tests the knowlege and the hability to use the concepts and the theorems viewed during the class.
Teaching methods	**Due to the COVID-19 crisis, the information in this section is particularly likely to change.** During the classes, students are invited to actively participate, by asking questions based on their previous knowledge of basic complex analysis and basic differential geometry.
Content	In 2019-2020, the course will address the main theorems of compact Riemann surfaces with applications to integrable systems. 1. Compact Riemann surfaces: - Riemann-Roch theorem - Abel's theorem - Jacobi varieties, Jacobi inversion problem and theta functions 2. Applcations to integrable systems (theory of solitons): - Baker-Akhiezer functions - Equations of the theory of solitons
Inline resources	Syllabus and references on the moodle website of LMAT2265.
Faculty or entity in charge	MATH

Programmes containing this learning unit (UE)

Program title	Acronym	Credits	Prerequisite	Aims
Master [120] in Mathematics	MATH2M	5		
Master [60] in Physics	PHYS2M1	5		
Master [60] in Mathematics	MATH2M1	5		
Master [120] in Physics	PHYS2M	5		