

[30h] 3 credits

This course is taught in the 1st semester

Teacher(s): Pierre Van Moerbeke
Language: french
Level: 2nd cycle course

Main themes

The course aims to study the analytical functions on the complex side and their singularities. After going over the Cauchy theorems and its residues, we will come to the study of meromorphic functions (which are holomorphic except for poles) on the complex projection space (rational functions) and on complex tores (elliptic functions). From this we will deduct several analytical results on elliptic functions from geometrical considerations while the representation of complex tores of 1 dimension conducts to algebraic geometry. Finally, we study the modules of complex tores (in other words non-conform complex tore space) and the modular functions. This course requires no previous knowledge in complex analysis.

Other credits in programs

MATH22/E	Deuxième licence en sciences mathématiques (Economie mathématique)	(3 credits)
MATH22/G	Deuxième licence en sciences mathématiques	(3 credits)
MATH22/S	Deuxième licence en sciences mathématiques (Statistique)	(3 credits)