

RIEMANN SURFACE, TAMARA GRAVA, 40 HOURS

- The main references shall be the course notes
- Prerequisite: complex analysis

Course material

- 1 Riemann surfaces: definition and examples
- 2 holomorphic and meromorphic functions on Riemann surface
- 3 Compact Riemann surface: genus, monodromy, homology
- 4 Differentials on Riemann surface and integration
 - Riemann bilinear relation
 - Jacobi variety and Abel theorem
 - Divisors and Riemann-Roch theorem
- 5 Jacobi inversion problem and theta functions.

Exam: You need to solve an exercise and give a seminar on an agreed topic

Starting period: February

Lecture notes: available <https://people.sissa.it/~grava/teaching.html>