

Geometry and differential equations

ECTS : 4

Volume horaire : 39

Description du contenu de l'enseignement :

CM : 19h30

TD : 19h30

1. Reminders on calculus (derivatives for functions with several variables, local inversion ...)
2. Submanifolds of a Euclidean space
3. Introduction to Riemannian geometry
4. Differential equations; existence and uniqueness of solutions
5. Explicit solutions of differential equations
6. Autonomous equations, equilibria and their stability

Compétence à acquérir :

This class provides an introduction to differential geometry and differential equations.

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