



UNIVERSITÀ
DI PARMA

DIPARTIMENTO DI INGEGNERIA
E ARCHITETTURA

PhD programme in Civil Engineering and Architecture

Short online course (2 ECTS, 12 h) on **Limit analysis of solids and structures**

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10 June 2021, 9:00-12:00 a.m. (CEST, UTC+2)
11 June 2021, 9:00-12:00 a.m.
17 June 2021, 9:00-12:00 a.m.
18 June 2021, 9:00-12:00 a.m.

The course aims at offering an overview on limit analysis of solids and structures, with reference to classical plasticity theory with associated flow rule. Both static and cyclic loading scenarios are considered. Limit analysis of frictional contact problems is also covered in the course.

We review the fundamentals of plasticity and limit analysis with application to common structural systems. The course will help you to understand better the inelastic behavior of solids and structures, and will assist you in performing non-linear elastic-plastic analysis of trusses, beams, frames and plates as well as to apply the theorems of limit analysis to such structures.

Details of the course can be found at this [Syllabus](#).

In the last lecture of the course (scheduled on 18 June), **two seminars** will be given by [prof. Aurora A. Pisano](#) (Università Mediterranea di Reggio Calabria), *Numerical procedures for limit analysis and their applications to structural elements*, and [Dr. Rosalba Ferrari](#) and [Dr. Aram Cornaggia](#) (Università di Bergamo), *Modern applications of limit analysis evolutive and direct computational methods in structural mechanics*.

At the end of the course, an assessment of students' learning will be formulated on the basis of an oral examination.

Students interested in participating to the course should register using [this form](#) by 7 June. Instructions will be sent to participants in due time, including link to the platform for online lectures.