



UNIVERSITÀ  
DEGLI STUDI DI MILANO-BICOCCA

## SYLLABUS DEL CORSO

### Introduction to Plasma Boundary in Fusion Devices

2122-86R-IPBFD

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#### Title

Introduction to Plasma Boundary in Fusion Devices

#### Teacher(s)

Marco Cavedon

#### Language

English

#### Short description

*Man-made plasmas almost always involve interaction with the solid-state, for example, electrodes or the walls of a containing vessel. In magnetically confined fusion devices, the physics of the boundary is of primary importance because it defines the rules for the power exhaust problem. The lastest is one of the most critical challenges for the realization of a commercial fusion power plant.*

**The lecture will provide an introduction to the physics of the plasma boundary in fusion devices. No pre-requisites are required, except basic concepts of electromagnetism. The lecture will cover the following topics:**

- **Magnetically confined fusion devices**

- **Transport and confinement**
- **The plasma boundary**
- **Physics of the scrape-off Layer and divertor**
- **A possible solutions to the exhaust problem**

## **CFU / Hours**

2 CFU / 16 Hours

## **Teaching period**

January 2022 - April 2022

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