



UNIVERSITÀ  
DEGLI STUDI DI MILANO-BICOCCA

## SYLLABUS DEL CORSO

### Laboratorio di Astrofisica

2021-1-F5801Q023

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#### Aims

Provide the background knowledge of current theories and observations of galaxy formation and evolution. Provide the background knowledge and skills for the analysis and modelling of observations from world-class observatories.

#### Contents

Modern theories and observations of galaxy formation and evolution; acquisition and processing of observations from large-aperture telescopes; analysis and interpretation of observations.

#### Detailed program

Theory and observations of galaxy formation and evolution: basic elements of galaxy formation; statistical properties of galaxies; clusters and groups of galaxies; galaxies at high redshifts; the intergalactic and circumgalactic medium; star formation and stellar populations.

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#### Prerequisites

Undergraduate degree in physics.

## **Teaching form**

Introductory lectures on theoretical background, data-reduction workshops, and activities in laboratories.

During the containment phase of covid, all lectures and laboratory activities will be completed remotely via webinar and VNC. Attendance during the scheduled hours is therefore required. It is also necessary a PC connected to internet to access the server located in the laboratory.

All activities will be in English.

## **Textbook and teaching resource**

Houjun Mo, Frank van den Bosch, Simon White; Galaxy Formation and Evolution; 2010 Cambridge University Press.

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## **Semester**

First and second semester.

## **Assessment method**

Written report and oral exam on the background lectures and material presented in the report.

## **Office hours**

By appointment (via email).

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