



UNIVERSITY OF PADUA
PHD COURSE IN ASTRONOMY
PHD COURSE IN PHYSICS

XXXIX CYCLE OPENING

OCTOBER 16TH , 2023
4:30 PM
AULA ROSTAGNI
VIA PAOLOTTI 9 - PADOVA

COURSES COORDINATORS

PROF. GIOVANNI CARRARO
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WEBSITES

<https://www.unipd.it/en/phd/astronomy>
<https://www.unipd.it/en/phd/physics>



**Dipartimento
di Fisica
e Astronomia**
Galileo Galilei



The PhD Courses in Astronomy and Physics welcome the new PhD students, starting their doctoral program in October 2023

PROGRAMME

4:30 PM Welcome

Flavio Seno

Head of the Department of Physics and Astronomy - UNIPD

Massimiliano Zattin

Vice Rector for Postgraduate and Doctorate Programmes -
UNIPD

5:00 PM Invited lecture

Emanuele Giallongo

INAF, Roma

6:00 PM Cocktail

INVITED LECTURE ABSTRACT

ACTIVE GALACTIC NUCLEI AT THE REIONIZATION EPOCH

The cosmic reionization is one of the most important and puzzling events in our Universe's history and the identification of the sources emitting enough UV radiation to reionize the Universe is still an open issue. Besides star forming galaxies, AGNs could give an important contribution to the reionization depending on their abundance at low luminosities and very high redshift ($z > 4$).

I will review the reionization history of the Universe on the basis of the latest observational constraints. I will discuss the controversial analysis about the contribution of various populations to the cosmic reionization with particular emphasis on the AGN contribution in light of the most recent studies based on deep X-ray observations and shallow but large optical/NIR ground based surveys. I will conclude with the recent JWST results which are revolutionizing the estimates of the number of AGNs in the epoch of reionization.