

Radiative processes

Detailed program of the second part of the course (P. Monaco)

- Telescopes and astronomies (16 March).
- Radio astronomy: historical background and physical processes
– **Maurilio Pannella** (6 May).
- The interstellar medium, emission lines (11 May).
- Galactic SEDs and galaxy physical properties (13 May).
- High-redshift galaxies (18 May).
- AGN: phenomenology and classifications (20 May).
- Radio astronomy: measuring radio signals and interferometry
– **Maurilio Pannella** (25 May).
- Radio astronomy: galaxy evolution and an overview of major observatories
– **Maurilio Pannella** (27 May).
- AGN: the unified model (1 June).
- AGN: proof of existence of black holes, AGN-galaxy coevolution (3 June).
- Inter-galactic medium and reionization (8 June).
- Radiative transport in an expanding universe
– **Fabio Fontanot** (10 June).

For the first part of the course, the reference textbook is **Radiative processes in astrophysics**, **G.B. Rybicki & A.P. Lightman**, Wiley.

Sources from the second part are notes and slides provided at each lecture. Some material has been taken from these reviews:

- P. Madau and M. Dickinson (2014), *Cosmic Star-Formation History*, Annual Reviews of Astronomy and Astrophysics, 52, 415.
- M. McQuinn (2016), *The Evolution of the Intergalactic Medium*, Annual Reviews of Astronomy and Astrophysics, 54, 313.