FDITE104 Astronomical instrumentation in space

(digital laboratory practice)

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Description: the topic of this course is the overview of the data processing techniques of various space-based observatories and their applications.

Topics:

- Data mining in space astronomy (MAST)
- Swift Space Observatory: optical and UV photometry
- Swift Space Observatory: UV spectroscopy
- Spitzer Space Observatory: IR photometry
- Spitzer Space Observatory: IR spectroscopy
- Hubble Space Telescope: PSF photometry
- TESS: image subtraction photometry, time series analysis

Literature:

- documentations of space-based instruments on the official web pages