

Francesco Leone

Curriculum Vitae

July 15, 1985, degree in Physics at the University of Catania in 1985.

January 1, 1988, permanent position at the Catania Astrophysical Observatory

December 1, 2006, associate Professor at the Department of Physics and Astronomy of the Catania University.

Scientific Activity

Mainly devoted to the study of polarized radiative transfer in magnetic fields both from the theoretical than observational view. My favorite papers:

- Magnetic intensification of spectral lines ([2003A&A...398..411S](#))
- Modelling the incomplete Paschen-Back effect in the spectra of magnetic Ap stars ([2008MNRAS.385.1813S](#))
- A Method to Measure the Transverse Magnetic Field and Orient the Rotational Axis of Stars ([2017ApJ...848..107L](#))

Best contribution to atomic physics is the first observation of radiative pumping in stars other than the Sun ([2018MNRAS.480.1656L](#)). With reference to stellar magnetospheres, every thing started with the discovery of “The variable radio emission from magnetic chemically peculiar stars” ([1991A&A...252..198L](#)).

As to High Energy Astrophysics, he is member of the MAGIC and Km3Net collaborations.

Since 2006 affiliated to the National Institute for Astrophysics and since 2013 affiliated to the National Institute for Nuclear Physics.

Technological Activity

Responsibility for:

- 1) the full Stokes Catania Astrophysical Observatory Spectropolarimeter ([2016AJ....151..116L](#)).
- 2) the polarimetric units for the high resolution SARG ([2003SPIE.4843..465L](#)), HARPS-N ([2014SPIE.9147E..2FL](#)) and DOLORES ([2014AN....335..117C](#)) of Telescopio Nazionale Galileo (TNG).

Involved in the realisation of the near infrared high resolution spectrograph GIANO ([2004SPIE.5492.1274O](#)) of the TNG.

Teaching and Educational Activity

As a professor at the Department of Physics and Astronomy, since 2006 he has been teaching Astrophysics Laboratory for students in Astrophysics. Since 1980, as research of the Catania Astrophysical Observatory, he has been supervisor of more than 30 degree and PhD theses.

Institutional and Organizational Activity

Head of “Sezione Astrofisica del Dipartimento di Fisica e Astronomia”.