PERSONAL INFORMATIONS   Lorenzo Lunghini

RESEARCH INTEREST

My research activity is based on data analysis of Gravitational Waves.
I'm interested in Continuous Gravitational Waves emitted from both isolated pulsars and neutron stars in binary systems.
Right now I'm working on Doppler-based vetoes to discard false candidates from the Frequency Hough pipeline at Virgo group of Rome.

EDUCATION

2021 – now   Master student in Astronomy & Astrophysics [LM - Ordin. 2019] (LM-58)
@ *Università "La Sapienza",* Piazzale A. Moro 5, 00185, Roma (RM) Italia*.*

2019 – 2021   Bachelor's degree in Physics with curricula in Astrophysics [L-270 Ordin. 2019] (L-30)
@ *Università "La Sapienza",* Piazzale A. Moro 5, 00185, Roma (RM) Italia*.*
Thesis: "*Ricerca di onde gravitazionali continue da stelle di neutroni isolate*".
Defended on November 15th, 2021.
Adviser: Pia Astone.

2014 – 2019   Scientific High School Applied Sciences Diploma
@ *Istituto di Istruzione Superiore "P. Aldi",* Piazza E. Benci, 58100, Grosseto (GR), Italia.

EXPERIENCE

Scholarships
Dec 2022   Scholarship winner for "PCTO LAB2GO" project
@ *Università "La Sapienza",* Piazzale A. Moro 5, 00185, Roma (RM) Italia.
@ *Istituto Nazionale di Fisica Nucleare (Rome section*), Piazzale A. Moro 2, 00185, Roma (RM), Italia.
@ *Italian Space Agency (ASI*), Via del Politecnico snc, 00133 Roma (RM), Italia.
Physics & robotic field.

Nov 2022   Fellowship grant for the Physics Department
@ *Università "La Sapienza",* Piazzale A. Moro 5, 00185, Roma (RM) Italia.
Library, physics museum, didactic laboratories and orientation.

Affiliations
2018 - now   Associazione Astrofili di Piombino
@ *Osservatorio astronomico di Punta Falcone,* Punta Falcone, 57025, Piombino (LI), Italia.
Achievements:
  Photometric studies of stars, galaxies and interstellar dust.
  Transit of exoplanets, light curve measurements and depth of transit estimation.
  Image production of astrophysical objects like globular clusters, open galactic clusters, gas clouds and dust.
  Spectrometric measurements in high and low resolution of visible radiation. Spectroscopic studies of stars including its classification and a Doppler study of relative speed of Jupiter.

WORK EXPERIENCE

Year 2023   Scholarship holder for LAB2GO project"
@ *Physics Department* of Università "La Sapienza", Piazzale A. Moro 5, 00185, Roma (RM) Italia.
@ *Department of Computer, Control and Management Engineering (DIAG)* of "La Sapienza" University of
Via Ariosto 25, 00185, Roma (RM), Italia.
@ *Italian Space Agency (ASI)*, Via del Politecnico snc, 00133 Roma (RM), Italia.

Programming ROver Spaziale ITAliano (ROSITA) rover for secondary and high schools, organizing and coordination of rover competition at ASI headquarter in Rome.
Project coordinator Luca Iocchi from DIAG.

Summer 2017   Lifeguard
@ *Centro balneare Polizia di Stato.,* Via A. Ponchielli, 58100, Marina di Grosseto (GR), Italia.

OPERATIVE SYSTEMS & SOFTWARE

Operative systems   Good use of Linux, especially its bash.
Master use of MacOS.

Software   Master use of Matlab (data analysis, numerical simulations and elaborating of electromagnetic spectrums of astronomical objects).
Normal use of bash language (creations of scripts).
Normal use of python and C language.
Master use of LATEX including creation of robust commands and environments.
Good use of MaxIm DL5 (tracking, calibrations and post production).
Good use of Zemax from OpticStudio for telescope design and performance optimization.

Autorizzo il trattamento dei miei dati personali ai sensi del Decreto Legislativo 30 giugno 2003, n. 196 "Codice in materia di protezione dei dati personali".

Il sottoscritto dichiara di essere consapevole che il presente *curriculum vitae* sarà pubblicato sul sito istituzionale dell'Ateneo, nella Sezione "Amministrazione trasparente", nelle modalità e per la durata prevista dal d.lgs. n. 33/2013, art. 15.

Date   27/06/2023   f.to: Lorenzo Lunghini