Paolo Cremonese

PostDoc Researcher

UIB @ Palma, Spain

paolocremonese.com

cremonesep25 [at] gmail.com

PaoloCremo

About me

I am a PostDoc researcher at the Universitat de las Illes Balears, in Palma, Spain. I work on gravitational lensing of gravitational waves.
I am passionate about technologies, data analysis, travelling, finance and learning new things. Like, for example, how to create a website! You can find it at paolocremonese.com, with more information about me.

Skills

Python	macOS
Linux	Mathematica
LaTeX	Slurm
Git	Apple Keynotes
HTML/CSS	

Languages

Italian - Mother Tongue

English - Fluent

Spanish - Basics

Polish - Very Basic

Interests

Gravitational Waves & Lensing

Data Analysis

Finance and Investments

Sports, Books & Piano.

Work Experience

Current — PostDoc Researcher — UIB, Palma, Spain
Member of LIGO collaboration.
Gravitational Waves Data Analysis

2018 — Internship as Data Scientist — DBA Group, Italy
I worked in a group developing methods and knowledge on how to record and elaborate different type of data, from meteorological to industrial

Projects

• `#research` I build and use models to analyze Gravitational Waves data with a focus on identifying lensed events. Additionally, I am actively contributing to a project aimed at organizing and automating different pipelines for the detection of such events.
• `#personalfinance #appdevelop #sideprojects` I am developing a mobile application to keep track of personal finance. This project involves the creation of a dedicated `Python` package designed to efficiently track expenses and investments. It will be openly accessible on my github page in the near future. Along with it, I am having fun coding and will soon upload a package to control Spotify custom playlists and a bot to get daily new papers from ArXiv based on user-defined topics.
• `#website` I designed and coded my own website, where I keep my info, thoughts and different things.

Education

2022 — Ph.D. in Physics — Szczecin, Poland
Gravitational lensing of Gravitational Waves

2017 — M.Sc. in Astronomy — Padova, Italy & Stockholm, Sweden
Thesis on lensing of gravitational waves done at Stockholm university

2015 — B.Sc. in Astronomy — Padova, Italy
Thesis on dark matter in spiral galaxies

Main Publications

#5 Follow-up Analyses to the O3 LIGO-Virgo-KAGRA Lensing Searches
#4 Characteristic features of Gravitational Wave lensing as probe of lens mass model
#3 Breaking the mass-sheet degeneracy with gravitational wave interference in lensed events
#2 High accuracy on H measurements from gravitational wave lensing events
#1 The lensing time delay between gravitational and electromagnetic waves

The complete list at inspirehep.net/authors/1859874

Mentions

#2 Top ArXiv papers from week15, 2021 - S.Vagnozzi - Linktoarticle
#1 Constraining the Hubble Constant with Lensed Gravitational Wave Events, 2019 - K. Shin - Link to article

Main Conferences

Talks & Posters

• "Mass-Sheet Degeneracy in Gravitational Wave Lensing" @ NBI - gravity seminar, 2023/12; LVK meeting, 2023/09;
• "Wave Optics in Gravitational Wave Lensing" @ UBC Gravity Seminar, 2023/09
• "Wave-optics in Gravitational Waves lensed events" @ UIB Relativity and Gravity group seminar, 2021/11
• Presented paper #3 @ GWverse, 2021/09; Gravitex 2021, 2021/08; COSMO '21, 2021/08; Amaldi 14, 2021/07 Cosmology from Home, 2021/07; Ibericos 2021/04
• Presented paper #2 @ Cosmoc controversies, 2019/10
• Member of organizing commitee @ The 6th Conference of the Polish Society on Relativity, 2019/09