PAOLO CREMONESE

I am a PhD student at the University of Szczecin, Poland.

I work on gravitational lensing of gravitational waves.

I am passionate about technologies, data analysis, travelling and learning new things. Like, for example, how to create a website! You can find it at *paolocremonese.com*, with more information about me.

CONTACT

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in Paolo Cremonese

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@PaoloCremo

SKILLS

Programming

Python LaTeX Mathematica

HTML/CSS

С

Operating Systems

Linux MacOS Windows

Languages

Italian English Spanish Polish



INTERESTS

Technology Data analysis Sports Travelling Books Piano

EDUCATION

2018 - present

♥ University of Szczecin supervisor: V. Salzano

PhD - Astrophysics

2015 - 2017

Stockholm University – Università degli studi di Padova Master's Degree - Astronomy

final result: 110L/100

supervisors: E. Mörtsell & S. Matarrese

Thesis' title: Delay in arrival time between Gravitational Waves and Electromagnetic signal due to

Gravitational Lensing

2011 - 2015

Q Università degli studi di Padova

final result: 98/100 supervisor: A. Pizzella

Thesis' title: Dark matter in spiral galaxies

Bachelor's Degree - Astronomy

PUBLICATIONS

DETAILED LIST ON PAGE 2

- #4 Characteristic features of Gravitational Wave lensing as probe of lens mass model; *P. Cremonese*, *D.F. Mota*, *V. Salzano*. 2111.01163
- #3 Breaking the mass-sheet degeneracy with gravitational wave interference in lensed events; P. Cremonese, J.M. Ezquiaga, V. Salzano. 2104.07055 Phys.Rev.D 104 (2021) 2, 023503
- #2 High accuracy on H_0 measurements from gravitational wave lensing events; P. Cremonese, V. Salzano. 1911.11786 Physics of the Dark Universe Vol. 28, pag. 100517, 2020
- #1 The lensing time delay between gravitational and electromagnetic waves; *P. Cremonese, E. Mörtsell.* 1808.05886

MENTIONS

#2 Top ArXiv papers from week 15, 2021 - S. Vagnozzi - 2021 - Link to article

#1 Constraining the Hubble Constant with Lensed Gravitational Wave Events
- K. Shin - 2019 - Link to article

WORK EXPERIENCE

🛗 Feb.-July, 2018

P DBA group, Treviso, Italy
Internship, data scientist

I worked in a group developing methods and knowledge on how to record and elaborate different type of data, from meteorological to industrial.

RESEARCH VISITS

DETAILED LIST ON PAGE 2

- D. Keitel @ UIB in November 2021
- D. F. Mota @ UiO in March 2020

CONFERENCES & DOCTORAL SCHOOL

COMPLETE LIST ON PAGE 3

GWverse, September 2021 - Cosmo '21, August 2021 - Amaldi 14, July 2021 - Cosmology from Home, July 2021 - Workshop on Gravitational Wave Astrophysics for Early Career Scientists, May 2021 - Ibericos 2021, March 2021 - IPARCOS School on Cosmology, December 2019 - Cosmic controversies, October 2019

PUBLICATIONS

Full list of publication can be found (at the links) on ArXiv and on INSPIRE.

Characteristic features of Gravitational Wave lensing as probe of lens mass model

#4

#3

#2

#1

P. Cremonese, D.F. Mota, V. Salzano

% ADS, arXiv

Breaking the mass-sheet degeneracy with gravitational wave interference in lensed events

,

P. Cremonese, J.M. Ezquiaga, V. Salzano

🗎 2021 **P** Phys.Rev.D 104 (2021) 2, 023503

% ADS, arXiv

High accuracy on \mathcal{H}_0 measurements from gravitational wave lensing events

P. Cremonese, V. Salzano

₩ 2019

Physics of the Dark Universe Vol. 28, pag. 100517, 2020

% ADS, arXiv

The lensing time delay between gravitational and electromagnetic waves

P. Cremonese, E. Mörtsell

2018 **a**rXiv:1808.05886

% ADS, arXiv

RESEARCH VISITS

#2 - visit to D. Keitel

GW lensing data analysis

1 Universitat de les Illes Balears

1 03/11-01/12/2021

#1 - visited D. Mota

modeling lenses in the contex of GW lensing

1 University of Oslo

6 08-15/03/2020

CONFERENCES & DOCTORAL SCHOOLS

Talks & posters

UIB Relativity and Gravitation group seminar

- Talk given titled "Wave-optics in Gravitational Waves lensed events"
- **m** UIB
- ## 05 November, 2021
- % web-site

GWverse

- Talk given based on 2104.07055
- **m** eCOST
- 30 August 03 September, 2021
- % web-site

Gravitex 2021

- Talk given based on 2104.07055
- **1** University of Kwazulu-Natal
- # 9-12 August, 2021
- % web-site

COSMO '21

- Poster presented based on 2104.07055
- **m** University of Illinois
- # 2-6 August, 2021
- web-site

Amaldi 14

- Poster presented based on 2104.07055
- 19-23 July, 2021
- web-site

Cosmology from Home

- Talk given based on 2104.07055
- **a** @cosmofromhome
- # 5-16 July, 2021
- web-site

Ibericos 2021

- Talk given based on 2104.07055
- m Universidade de Coimbra
- # 29 March 1 April, 2021
- % web-site

Cosmic controversies

- Poster presented based on 1911.11786
- **m** University of Chicago
- # 5-8 October, 2019
- % web-site

The 6th Conference of the Polish Society on Relativity

- Member of organizing committee
- m University of Szczecin
- ## 23-26 September, 2019
- % web-site

Participated

4th Azores school on Observational Cosmology

- institute of Astrophysics and Space Sciences
- m 06-12 September, 2021
- % web-site

AlteCosmoFun '21

- **m** University of Szczecin
- m 06-10 September, 2021
- % web-site

GW Open Data Workshop #4

- i LIGO Virgo Collaboration
- # 10-14 May, 2021
- % web-site

11th Iberian Gravitational Waves Meeting

- Astronomy and Astrophysics Department (DAA) and the Mathematics Department (DM) of the University of Valencia
- 9-11 June, 2021
- % web-site

Workshop on Gravitational Wave Astrophysics for Early Career Scientists

- in Lorentz Center, Leiden University, the Netherlands
- # 3-7 May, 2021
- % web-site

First EuCAPT Annual Symposium

- **m** CERN
- # 5-7 May, 2021
- % web-site

Current Challenges in Gravitational Physics

- INFN erc SISSA ifpU
- ## 21-28 April, 2021
- % web-site

IPARCOS School on Gravitational Waves

- universidad Compultense de Madrid
- # 18-20 December, 2019
- % web-site

XIII Tonale Winter School on Cosmology

- i Heidelberg University, Theoretical Physics and Astrophysics institutes
- # 9-13 December, 2019
- % web-site