

# PAOLO CREMONESE

I am a PhD student at 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](http://paolocremonese.com), with more information about me.



## CONTACT

✉ [paolo.cremonese@usz.edu.pl](mailto:paolo.cremonese@usz.edu.pl)

✉ [cremonesep25@gmail.com](mailto:cremonesep25@gmail.com)

🏠 [paolocremonese.com](http://paolocremonese.com)

🏛️ [cosmo.usz.edu.pl/pcremonese](http://cosmo.usz.edu.pl/pcremonese)

🐦 [@paolo\\_cre](https://twitter.com/paolo_cre)

🌐 Paolo Cremonese

📞 0000-0001-6472-8509

📱 @PaoloCremo

## SKILLS

### Programming

Python

LaTeX

Mathematica

HTML/CSS

C



### Operating Systems

Linux

MacOS

Windows



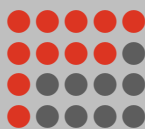
### Languages

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. Mörtzell & S. Matarrese

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

📅 2011 - 2015

📍 Università degli studi di Padova

Bachelor's Degree - Astronomy

final result: 98/100

supervisor: A. Pizzella

Thesis' title: Dark matter in spiral galaxies

## PUBLICATIONS

DETAILED LIST ON PAGE 2

#4 Characteristic features of Gravitational Wave lensing as probe of lens mass nature; *P. Cremonese, D.F. Mota, V. Salzano. soon on arXiv*

#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. Mörtzell. 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

📍 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.

## 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 - Current challenges in gravitational physics, April 2021 - Ibericos 2021, March 2021 - IPARCOS School on Cosmology, December 2019 - Cosmic controversies, October 2019


## PUBLICATIONS

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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 nature

#4


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

 2021  soon on arXiv

 [ADS](#), [arXiv](#)

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

#3

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

 2021  Phys.Rev.D 104 (2021) 2, 023503

 [ADS](#), [arXiv](#)

High accuracy on  $H_0$  measurements from gravitational wave lensing events

#2

 **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

#1

 **P. Cremonese**, E. Mörtzell


 2018


 [ADS](#), [arXiv](#)


## RESEARCH VISITS

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#2 - visit to **D. Keitel**

 GW lensing data analysis


 Universitat de les Illes Balears

 03/11-01/12/2021

#1 - visited **D. Mota**

 modeling lenses in the context of GW lensing

 University of Oslo

 08-15/03/2020

# CONFERENCES & DOCTORAL SCHOOLS

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## Talks & posters

### UIB Relativity and Gravitation group seminar

💬 Talk given titled "*Wave-optics in Gravitational Waves lensed events*"

🏛️ UIB

📅 05 November, 2021

🔗 [web-site](#)

### GWverse

💬 Talk given based on 2104.07055

🏛️ eCOST

📅 30 August - 03 September, 2021

🔗 [web-site](#)

### Gravitex 2021

💬 Talk given based on 2104.07055

🏛️ University of Kwazulu-Natal

📅 9-12 August, 2021

🔗 [web-site](#)

### COSMO '21

💬 Poster presented based on 2104.07055

🏛️ University of Illinois

📅 2-6 August, 2021

🔗 [web-site](#)

### Amaldi 14

💬 Poster presented based on 2104.07055

🏛️ OzGrav & IUPAP

📅 19-23 July, 2021

🔗 [web-site](#)

### Cosmology from Home

💬 Talk given based on 2104.07055

🏛️ @cosmofromhome

📅 5-16 July, 2021

🔗 [web-site](#)

### Ibericos 2021

💬 Talk given based on 2104.07055

🏛️ Universidade de Coimbra

📅 29 March - 1 April, 2021

🔗 [web-site](#)

### Cosmic controversies

💬 Poster presented based on 1911.11786

🏛️ University of Chicago

📅 5-8 October, 2019

🔗 [web-site](#)

### The 6th Conference of the Polish Society on Relativity

💬 Member of organizing committee

🏛️ University of Szczecin

📅 23-26 September, 2019

🔗 [web-site](#)

## Participated

### 4th Azores school on Observational Cosmology

🏛️ Institute of Astrophysics and Space Sciences

📅 06-12 September, 2021

🔗 [web-site](#)

### AlteCosmoFun '21

🏛️ University of Szczecin

📅 06-10 September, 2021

🔗 [web-site](#)

### GW Open Data Workshop #4

🏛️ 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

🏛️ Lorentz Center, Leiden University, the Netherlands

📅 3-7 May, 2021

🔗 [web-site](#)

### First EuCAPT Annual Symposium

🏛️ 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 Complutense de Madrid

📅 18-20 December, 2019

🔗 [web-site](#)

### XIII Tonale Winter School on Cosmology

🏛️ Heidelberg University, Theoretical Physics and Astrophysics institutes

📅 9-13 December, 2019

🔗 [web-site](#)