# **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, hot to create a website! You can find it at paolocremonese.com, with more information about me.

# CONTACT

paolo.cremonese@usz.edu.pl

cremonesep25@gmail.com

paolocremonese.com

cosmo.usz.edu.pl/pcremonese

@paolo\_cre

in Paolo Cremonese

0000-0001-6472-8509

@PaoloCremo

### **SKILLS**

### **Programming**

**Python** LaTeX Mathematica

HTML/CSS

# **Operating Systems**

Linux **MacOS** Windows

Languages

Italian **English Spanish** 

**Polish** 

### **INTERESTS**

**Technology** Data analysis **Sports Travelling Books** 

**Piano** 

# **EDUCATION**

**Q** 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: F. Mörtsell & 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

final result: 98/100 supervisor: A. Pizzella

Thesis' title: Dark matter in spiral galaxies

Bachelor's Degree - Astronomy

# **PUBLICATIONS**

**DETAILED LIST ON PAGE 2** 

- #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**

Top ArXiv papers from week 15, 2021

S. Vagnozzi

**∰** 2021

sunnyvagnozzi.com/blog

Link to article

Constraining the Hubble Constant with Lensed Gravitational Wave Events

K. Shin

**2019** 

astrobites.org

Link to article

# **WORK EXPERIENCE**

Feb.-July, 2018

Internship, data scientist

OBA group, Treviso, Italy 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 - 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.

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

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

% ADS, arXiv ₩ 2021 Phys.Rev.D 104 (2021) 2, 023503

#3

#2

#1

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 % ADS, arXiv

# **RESEARCH VISITS**

#1 - visited **D. Mota** 

modeling lenses in the contex of lensing of GW

**m** University of Oslo

**1** 08-15/03/2020

# **CONFERENCES & DOCTORAL SCHOOLS**

#### Talks & posters

### **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

i 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

universidade de Coimbra

## 29 March - 1 April, 2021

% web-site

# Cosmic controversies

Poster presented based on 1911.11786

■ University of Chicago

% 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 only

## GW Open Data Workshop #4

**1** 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

CERN

% 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

m Heidelberg University, Theoretical Physics and Astrophysics institutes

# 9-13 December, 2019

% web-site