

# GIOVANNI ALBERTO VERZA

## PERSONAL INFORMATIONS

---

**Date of Birth:** September, 7<sup>th</sup>, 1989  
**Nationality:** Italy  
**Languages:** Italian (Native), English  
**Address:** via Euganea 36, 35141, Padova (PD)  
**E-mail:** giovanni.verza@pd.infn.it, giova.verza@gmail.com  
**ORCID:** <https://orcid.org/0000-0002-1886-8348>

## RESEARCH WORK AND EDUCATION

---

<b>PostDoc</b> INFN sezione di Padova	2022 – now
<b>PhD in Physics</b> Università degli Studi di Padova	2018 – 2022
<b>Master in Physics</b> Università degli Studi di Milano	2016 – 2018
<b>Bachelor in Theology</b> Facoltà Teologica dell'Italia Settentrionale	2011 – 2016
<b>Bachelor in Physics</b> Università degli Studi di Milano Bicocca	2008 – 2011

## SCIENTIFIC PRODUCTION

---

### Publications

- S. Contarini, G. Verza, A. Pisani, N. Hamaus et. al., *Euclid: Cosmological forecasts from the void size function*, A&A forthcoming, DOI:10.1051/0004-6361/202244095, arXiv:2205.11525.
- N. Hamaus, M. Aubert, A. Pisani, S. Contarini, G. Verza et. al., *Euclid: Forecasts from redshift-space distortions and the Alcock-Paczinski test with cosmic voids*, A&A 658, A20 (2022), DOI:10.1051/0004-6361/202142073, arXiv:2108.10347.
- G. Verza, A. Pisani, C. Carbone, N. Hamaus, L. Guzzo, *The void size function in dynamical dark energy cosmologies*, JCAP12(2019)040, DOI: 10.1088/1475-7516/2019/12/040, arXiv:1906.00409.

### Preprints

- G. Verza, C. Carbone, A. Renzi, *The halo bias inside cosmic voids*, arXiv:2207.04039.
- M. Bonici, C. Carbone, S. Davini, P. Vielzeuf, L. Paganin, V. F. Cardone, N. Hamaus, A. Pisani, A. Hawken, A. Kovács, A. Caminata, S. di Domizio, M. Pallavicini, G. Testera, S. Tosi, M. Aubert, S. Contarini, G. Verza, I. Tutusaus, S. Escoffier, S. Clesse, V. Pettorino, Z. Sakr, D. Sapone, V. Yankelevich, et al., *Euclid: Forecasts from the void-lensing cross-correlation*, arXiv:2206.14211.

### In preparation

- G. Verza, C. Carbone, A. Pisani, A. Renzi, *Void counts to disentangle dark energy and neutrinos*, to appear.

## SCIENTIFIC COLLABORATIONS

---

**Euclid Consortium Member** from 2018

Galaxy clustering science working group, Voids work package.

- Co-lead of the Euclid Standard Project *Euclid: Forecasts from redshift-space distortions and the Alcock-Paczinski test with cosmic voids*.

**Collaborating on Subaru Prime Focus Spectrograph predictions for void statistics**

## PRESENTATIONS

---

<b>Euclid: Cosmological forecasts from the void size function</b> Euclid Consortium Meeting, Oslo (Norway)	May 2022
<b>Cosmology with cosmic void statistics</b> Euclid Consortium Meeting, Oslo (Norway)	May 2022
<b>The Void Size Function in Dynamical Dark Energy Cosmologies</b> Convegno SIF online	September 2020
<b>The Void Statistics in Dynamical Dark Energy Models</b> 3 <sup>th</sup> Meeting Nazionale Collaborazione Euclid, Bologna (Italy)	February 2020
<b>The Void Size Function in Dynamical Dark Energy Cosmologies</b> Euclid Joint Meeting, Paris (France)	February 2020
<b>Cosmic voids to probe Dark Energy</b> UniVersum, Milano (Italy)	April 2019

## CONFERENCES AND WORKSHOPS

---

<b>Euclid Consortium Meeting</b> Oslo (Norway)	May 2022
<b>Euclid Consortium Meeting</b> Remote form (Lausanne, Swiss)	May 2021
<b>4<sup>th</sup> Meeting Nazionale Collaborazione Euclid</b> Remote form	February 2021
<b>Convegno SIF</b> Remote form	September 2020
<b>Euclid Consortium Meeting</b> Remote form (Barcellona, Spain)	May 2020
<b>3<sup>rd</sup> Meeting Nazionale Collaborazione Euclid</b> Bologna (Italy)	February 2020
<b>Euclid Joint Meeting</b> Paris (France)	February 2020
<b>Fundamental Physics with Future CMB Probes</b> SISSA Trieste (Italy)	October 2019
<b>UniVersum</b> Milano (Italy)	April 2019
<b>Euclid and Beyond. The Many Faces of Modern Cosmology</b> CNR Roma (Italy)	February 2019

## SCHOOLS

---

<b>Programming paradigms for GPU devices</b> CINECA remote form (Bologna, Italy)	November 2021
<b>17<sup>th</sup> advanced school on parallel computing</b> CINECA remote form (Bologna, Italy)	March 2021
<b>Containerization in high performance computing</b> CINECA remote form (Bologna, Italy)	November 2020
<b>Advanced Euclid School: The Science of Future Cosmological Surveys</b> Remote form (Les Houches, France)	June 2020
<b>Astrostatistics school: Bayesian Methods for the Physics Sciences</b> Milano (Italy)	June 2019
<b>Theoretical Aspects of Astroparticle Physics, Cosmology and Gravitation</b> GGI Firenze (Italy)	March 2019
<b>N-body techniques for astrophysics</b> Course of PhD school in Astronomy, Università di Padova (Italy)	October 2018

## DIGITAL COMPETENCES

---

**Programming languages:** Python, C++, Mathematica

**Containerization:** Singularity, Docker

**Scientific codes:** CAMB, CLASS, Astropy, Pylians, nbbodykit, VIDE, various cosmological emulators, etc.

**General skills:** Linux system, High Performance Computing clusters, parallel computing

## OUTREACH ACTIVITIES

---

**Conference: Illuminiamo l'Universo Oscuro.**

December 2021

**Energia e materia oscura, le componenti che determinano l'evoluzione dell'Universo.**

"Let's light up the Dark Universe. Dark matter and dark energy, the components that drive the evolution of the Universe."

## REFERENCES

---

**Sabino Matarrese**

sabino.matarrese@pd.infn.it

Università degli Studi di Padova, INFN sezione di Padova

**Carmelita Carbone**

carmelita.carbone@inaf.it

INAF-IASF, Università degli Studi di Milano

**Alice Pisani**

apisani@astro.princeton.edu

CCA, Cooper, Princeton

*Giovanni Alberto Tesauro*