


# NICOLA BORGHI

## Contact Information

- ▶ Born in Cento (Ferrara), Italy, 22 May 1996
-  Dipartimento di Fisica e Astronomia “Augusto Righi”  
University of Bologna, via Piero Gobetti 93/2, Bologna, Italy
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-  [nicoborghi.github.io](https://github.com/nicoborghi)

## EDUCATION

### University degrees

- Ph.D. in Astrophysics** 11/2020 – Present  
Department of Physics and Astronomy “Augusto Righi”, University of Bologna, Italy  
Project: “Cosmology with gravitational waves and combination with other probes”  
Advisors: Dr. Michele MORESCO & Prof. Andrea CIMATTI
- Laurea magistrale in Astrophysics and Cosmology (cum laude)** 9/2018 – 10/2020  
University of Bologna, Italy  
Advisors: Prof. Andrea CIMATTI & Dr. Michele MORESCO
- Laurea triennale in Astronomy (cum laude)** 9/2015 – 7/2018  
University of Bologna, Italy
- Scientific High School Diploma** 9/2010 – 7/2015  
ISIT Bassi Burgatti, Cento (FE), Italy

### Other courses



- ISAPP Summer School on Gravitational Waves** 6/2021  
Topics: gravitational wave theory, sources and detectors (current and upcoming)  
Project: gravitational wave data analysis
- Asiago Multi-Messenger Astrophysics School** 1/2020  
Department of Physics and Astronomy (DFA) of the University of Padova, Italy  
Topics: astrophysical neutrinos, GWs, cosmic rays and detectors  
Project: broadband spectral fitting of blazars
- SperimEstate - Summer Internship** 6/2014  
INAF OAS - National Institute for Astrophysics, Bologna, Italy  
Topic: study of soft  $\gamma$ -ray selected giant radio galaxies (see Bassani et al. 2016)

## RESEARCH

### First-author publications

1. Borghi, N., Moresco, M., Cimatti, A., et al. 2021a. [arxiv.org/abs/2106.14894](https://arxiv.org/abs/2106.14894)
2. Borghi, N., Moresco, M., & Cimatti, A. 2021b. [arxiv.org/abs/2110.04304](https://arxiv.org/abs/2110.04304)

### Contributed talks

-  Sixteenth Marcel Grossmann Meeting 7/2021  
*A new measurement of the expansion history of the Universe from cosmic chronometers in the LEGA-C survey*
-  Massively Parallel Large Area Spectroscopy from Space 6/2021  
*Robust constraints on the physical properties of individual passive galaxies from Lick indices in the LEGA-C survey*

## OUTREACH

<i>Web-based</i>	<b>"Astroversi" - university podcast</b> <span style="float: right;"><i>since 2021</i></span> Department of Physics and Astronomy "Augusto Righi", University of Bologna <ul style="list-style-type: none"><li>☞ Science outreach podcast structured in four different programs covering general and more advanced astrophysical topics, with a focus on the Ph.D. life, state-of-the-art research, and spin-offs. Role: pre &amp; post-production. <a href="#">Listen on Spotify</a>.</li></ul>
<i>Public engagement</i>	<b>Public lectures and stargazing events</b> <span style="float: right;"><i>since 2016</i></span> Gruppo Astrofili Persicetani, San Giovanni in Persiceto and surrounding areas <ul style="list-style-type: none"><li>☞ Lecturer at the Planetarium (20+ talks, <a href="#">see the topics</a>)</li><li>☞ Stargazing nights (10+)</li></ul>
<i>STEM activities</i>	<b>Museo del Cielo e della Terra</b> <span style="float: right;"><i>since 2017</i></span> Agen.Ter., San Giovanni in Persiceto (BO), Italy <ul style="list-style-type: none"><li>☞ Physics labs for elementary to high schools (50+)</li></ul> <b>Officina Laboratorio</b> <span style="float: right;"><i>6/2021</i></span> Department of Physics and Astronomy "Augusto Righi", University of Bologna <ul style="list-style-type: none"><li>☞ Laboratory activities for high schools</li></ul>
<b>OTHER INFORMATION</b>	
<i>Extra-curricular activities</i>	<i>Regional Commissaire</i> , Italian Cycling Federation <span style="float: right;"><i>since 2017</i></span> <i>Volunteer amateur astronomer</i> , Gruppo Astrofili Persicetani ( <a href="http://www.gapers.it">www.gapers.it</a> ) <span style="float: right;"><i>since 2016</i></span>
<i>Awards</i>	Best poster prize at the ISAPP Summer School on Gravitational Waves <span style="float: right;"><i>2021</i></span> Riconoscimento "Francesco Viviani", Ferrara, Italy <span style="float: right;"><i>2015</i></span> Italian Astronomy Olympiad, Macerata, Italy (finalist in the national competition) <span style="float: right;"><i>2012</i></span>
<i>Languages</i>	ENGLISH · Fluent (C1) · IELTS Academic 8 (listening 8.5, reading 9, writing 6.5, speaking 7) ITALIAN · Native speaker FRENCH · Basic user
<i>IT Skills</i>	<b>Python</b> (intermediate) · <b>FORTRAN</b> (advanced) · <b>RStudio</b> (intermediate) · <b>C++</b> (intermediate) · <b>Linux/Unix</b> (Debian-based) · <b>LaTeX</b> · <b>HTML5 &amp; CSS</b> · <b>OpenOffice</b> · <b>MS Office &amp; Visual Studio</b> · <b>Mathematica</b> · <b>Single-Board Computers &amp; Microcontrollers</b> (Arduino) · <b>Adobe Creative Cloud</b>
<i>Interests</i>	Observational Cosmology · Extragalactic Astronomy · Galaxy Evolution · Multi-messenger Astronomy · Computer Science & Electronics · Stargazing · Photography · Science outreach & public speaking · Travelling · Cooking