NICOLA BORGHI

Contact Information	 From Renazzo (Ferrara), Italy, 22 May 1996 Dipartimento di Fisica e Astronomia "Augusto Righi" University of Bologna, via Piero Gobetti 93/2, Bologna, Ita nicola.borghi6@unibo.it orcid.org/0000-0002-2889-8997 nicoborghi.github.io 	aly				
Current position	<i>Post-doc</i> in Gravitational-wave Cosmology 12/2023 – 11/20. Department of Physics and Astronomy "Augusto Righi", University of Bologna, Italy Project: <i>Gravitational-wave cosmology with future detectors and galaxy surveys</i>					
	EDUCATION					
University degrees	<i>Ph.D.</i> in Astrophysics Department of Physics and Astronomy "Augusto Righi", University of Thesis: <i>Unveiling the Expansion History of the Universe with Cosmic Chron</i> <i>Waves</i> - Supervisor: Michele Moresco, (co-) Andrea CIMATTI	11/2020 – 11/2023 of Bologna, Italy ometers and Gravitational				
	Master of Science in Astrophysics and Cosmology (cum laude) University of Bologna, Italy	9/2018 – 10/2020				
	Bachelor of Science in Astronomy (cum laude) University of Bologna, Italy	9/2015 – 7/2018				
	Scientific High School Diploma ISIT Bassi Burgatti, Cento (FE), Italy	9/2010 – 7/2015				
Other activities	<i>Visiting Ph.D. student</i> at Univesité de Genève (Marco Polo program) 4-6/2022 Project: statistical methods for cosmology with gravitational waves and galaxy catalogs (with Prof. Michele MAGGIORE & Dr. Michele MANCARELLA)					
	ISAPP Summer School on Gravitational Waves	6/2021				
	Asiago Multi-Messenger Astrophysics School, University of Padova	a 1/2020				
	SperimEstate - Summer Internship at INAF OAS Bologna Project: study of soft γ -ray selected giant radio galaxies (see Bassani e	6/2014 et al. 2016)				
	RESEARCH ORCID ADS					
First-author publications	 Nicola Borghi, Michele Moresco, Andrea Cimatti, Alexandre Huchet, Salvatore Quai, and Lucia Pozzetti. Toward a better understanding of cosmic chronometers: Stellar population properties of passive galaxies at intermediate redshift. <i>The Astrophysical</i> <i>Journal</i>, 927(2):164, March 2022a. doi: 10.3847/1538-4357/ac3240. URL https://ui.adsabs.harvard.edu/abs/2022ApJ927164B 					
	2. Nicola Borghi, Michele Moresco, and Andrea Cimatti. Toward a l Cosmic Chronometers: A New Measurement of $H(z)$ at $z \sim 0.7$. <i>Letters</i> , 928(1):L4, March 2022b. doi: 10.3847/2041-8213/ac3fb2. https://ui.adsabs.harvard.edu/abs/2022ApJ928L4B	Better Understanding of <i>The Astrophysical Journal</i> URL				
Other publications	 Elcio Abdalla et al. Cosmology intertwined: A review of the particle physics, astrophysics, and cosmology associated with the cosmological tensions and anomalies. <i>Journal of High Energy Astrophysics</i>, 34:49–211, June 2022. doi: 10.1016/j.jheap.2022.04.002. URL https://ui.adsabs.harvard.edu/abs/2022JHEAp3449A 					
	2. Kang Jiao, Nicola Borghi, Michele Moresco, and Tong-Jie Zhang $H(z)$ Data from Full-Spectrum Fitting of Cosmic Chronometers <i>arXiv e-prints</i> , art. arXiv:2205.05701, May 2022	. A New Observational in the LEGA-C Survey.				

Contributed talks	 XIII ET Symposium - Cagliari (Italy) International conference PUMA22 - Sestri Levante (Italy) EAS2022 Valencia - Galaxies as cosmological tracers EAS2022 Valencia - ESO@60: A stairway to the Universe Université de Genève - Cosmology group meetings Hypatia Colloquium 2022: Early Career Astronomer series at ESO Sixteenth Marcel Grossmann Meeting Massively Parallel Large Area Spectroscopy from Space 	5/2023 9/2022 7/2022 6/2022 4/2022 7/2021 6/2021			
Mactor	SUPERVISING AND TEACHING	2027 2022			
theses	Master Degree Course, Astrophysics and Cosmology, DIFA, University of Bologna				
Teaching assistant	Elements of Informatics (INF/01)A.Y.First cycle degree programme, Astronomy, DIFA, University of Bologna	2022–2023			
	Astrophysics Laboratory (FIS/05, optical/near-IR module)A.Y.Master Degree Course, Astrophysics and Cosmology, DIFA, University of Bologna	2021–2022			
	OUTREACH ACTIVITY				
Public engagement	Public lectures and stargazing eventssince 2016Gruppo Astrofili Persicetani, San Giovanni in Persiceto and surrounding areasImage: Image: Image: Since 2016Image: Image: Image: Image: Since 2016Image: Image:				
	Press & Media				
Schools	Museo del Cielo e della Terra - FisicLab Agen.Ter., San Giovanni in Persiceto (BO), Italy Ø Laboratory activities for high school students	since 2017			
	 University's "Third-Mission" Department of Physics and Astronomy "Augusto Righi", University of Bologna "Dottorato et al." podcast (pre & post-production) - Listen on Spotify Officina Laboratorio 2021, 2022, 2023 (tutor) - Earth's motions and the concept of time Piano Lauree Scientifiche 2022 (tutor) - Measuring the Universe Fisica Experience museum (scientific advisor with N. Semprini) - fisicaexperience.it 				
	OTHER INFORMATION				
Other activities	National Commissaire, Italian Cycling Federation (regional 2017–2022) Volunteer amateur astronomer, Gruppo Astrofili Persicetani (www.gapers.it)	since 2023 since 2016			
Awards	Best MS Thesis prize, DIFA, University of Bologna	2021			
	Bisonoscimento "Francosco Viuiani" Ectrara Italy	2021			
	Italian Astronomy Olympiad, Macerata, Italy (finalist in the national competition)	2015			
Languages	Fluent (C1) ENGLISH · Fluent (C1) IELTS Academic 8 (listening 8.5, reading 9, writing 6.5, speaking 7) ITALIAN · Native speaker				

FRENCH · Basic user

Code	PyLick	·	CHIMERA
developement			

- IT Skills
 Python (advanced) · Julia · FORTRAN · C++ · RStudio · Linux/Unix OS

 HTML5 & CSS · LATEX · OpenOffice · MS Office & Visual Studio · Mathematica

 Single-Board Computers & Microcontrollers (Arduino) · Adobe Creative Cloud
- Interests
 Observational Cosmology · Gravitational Waves · Cosmic Chronometers · Galaxy

 Evolution · Theoretical Cosmology · Multi-messenger Astronomy · Computer Science & Electronics · Stargazing · Photography · Science Outreach · Travelling · Cooking