

Lodovico Capuano

ID: 0 | Work permit: Italian | Place of birth: Italy | Nationality: Italian | Phone number: (+39) 0 (Mobile) |

Email address: lcapuano@sissa.it | Address: Italy (Home)

EDUCATION AND TRAINING

01/10/2021 – 18/09/2025 Trieste, Italy

PH.D. IN ASTROPARTICLE PHYSICS Scuola Internazionale Superiore di Studi Avanzati (SISSA)

Website <https://www.sissa.it/> | Field of study Physics | Level in EQF EQF level 8

01/10/2018 – 21/04/2021 Padova, Italy

MASTER IN PHYSICS OF THE UNIVERSE Università degli studi di Padova

Field of study Physics | Level in EQF EQF level 7

01/10/2015 – 12/12/2018 Padova, Italy

BACHELOR IN ASTRONOMY Università degli studi di Padova

Field of study Astronomy | Level in EQF EQF level 6

LANGUAGE SKILLS

Mother tongue(s): **ITALIAN**

Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
ENGLISH	B2	C1	B2	B2	C1
GERMAN	B1	B1	A2	A2	A2

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

PUBLICATIONS

2025

[Systematic bias in LISA ringdown analysis due to waveform inaccuracy](#)

Lodovico Capuano, Massimo Vaglio, Rohit Chandramouli, Chantal Pitte, Adrien Kuntz, Enrico Barausse, e-Print: 2506.21181 [gr-qc], accepted for publication in Phys.Rev.D

Authors: Lodovico Capuano, Massimo Vaglio, Rohit Chandramouli, Chantal Pitte, Adrien Kuntz, Enrico Barausse

2025

[Probing supermassive black hole scalarization with Pulsar Timing Arrays](#)

Clemente Smarra, Lodovico Capuano, Adrien Kuntz, Published in: Phys.Rev.D 112 (2025) 6, 6, e-Print: 2505.20402 [gr-qc]

Authors: Clemente Smarra, Lodovico Capuano, Adrien Kuntz

2024

[Higher-derivative corrections to the Kerr quasinormal spectrum](#)

Pablo A. Cano, Lodovico Capuano, Nicola Franchini, Simon Maenaut, Sebastian Völkel, Published in: Phys.Rev.D 110 (2024) 12, 124057, e-Print: 2409.04517 [gr-qc]

Authors: Pablo A. Cano, Lodovico Capuano, Nicola Franchini, Simon Maenaut, Sebastian Völkel

2024

[A parametrized quasi-normal mode framework for modified Teukolsky equations](#)

Pablo A. Cano, Lodovico Capuano, Nicola Franchini, Simon Maenaut, Sebastian Völkel, Published in: Phys.Rev.D 110 (2024) 10, 104007, e-Print: 2407.15947 [gr-qc]

Authors: Pablo A. Cano, Lodovico Capuano, Nicola Franchini, Simon Maenaut, Sebastian Völkel

2024

[Perturbation of the Vaidya metric in the frequency domain: quasi-normal modes and tidal response](#)

Lodovico Capuano, Luca Santoni, Enrico Barausse, Published in: Phys.Rev.D 110 (2024) 8, 084081, e-Print: 2407.06009 [gr-qc]

Authors: Lodovico Capuano, Luca Santoni, Enrico Barausse

2023

[Black hole hairs in scalar-tensor gravity and the lack thereof](#)

Lodovico Capuano, Luca Santoni, Enrico Barausse, Published in: Phys.Rev.D 108 (2023) 6, 6, e-Print: 2304.12750 [gr-qc]

Authors: Lodovico Capuano, Luca Santoni, Enrico Barausse

2023

[Kinetic field theory: generic effects of alternative gravity theories on non-linear cosmic density-fluctuations](#)

Alexander Oestreicher, Lodovico Capuano, Sabino Matarrese, Lavinia Heisenberg, Matthias Bartelmann, Published in: JCAP 07 (2023) 029, e-Print: 2210.16014 [astro-ph.CO]

Authors: Alexander Oestreicher, Lodovico Capuano, Sabino Matarrese, Lavinia Heisenberg, Matthias Bartelmann

● **CONFERENCES AND SEMINARS**

Varna, Bulgaria, 19/06/2025

Contributed talk: "Black hole scalarization at all scales", at the conference " Black holes, neutron stars and gravitational waves at Black Sea"

Copenhagen, Denmark, 16/05/2025

Contributed talk: "Waveform systematic bias in the ringdown analysis with LISA", at the conference "5th meeting on gravitational wave science in Scandinavia"

Nottingham, Great Britain, 10/04/2025

Contributed talk: "Waveform systematic bias in the ringdown analysis with LISA", at the conference "Tales of Gravity"

Pisa, Italy, 11/02/2025

Talk: "Black hole ringing in General Relativity and beyond", for the TEONGRAV seminar

Tübingen, Germany, 14/11/2024

Talk: "Black hole ringing in General Relativity and beyond", for the Einstein seminar

Rome, Italy, 17/09/2024

Contributed talk: "Contributed talk "Perturbation of the Vaidya metric in the frequency domain: quasi-normal modes", at TEONGRAV meeting

Barcelona, Spain, 22/05/2024

Short talk + poster "Perturbation of slowly evolving black holes: quasi-normal modes and tidal response", at the conference " Gravity: Challenges beyond General Relativity"

Tübingen, Germany, 01/02/2024

Talk "Perturbation of slowly evolving black holes: quasi-normal modes and tidal response" for the Einstein seminar

Naples, Italy, 20/12/2023

Contributed talk "Black hole hairs in scalar-tensor gravity and the lack thereof" at TEONGRAV meeting

Southampton, Great Britain, 13/04/2023

Contributed talk "Black hole hairs in scalar-tensor gravity and the lack thereof", at the conference "BritGrav"

● **SKILLS**

Programming skills: Python, Mathematica

● **WORK EXPERIENCE**

📍 – TRIESTE, ITALY

LIBRARY ASSISTANT IN SISSA LIBRARY – 03/2023 – 03/2025

📍 ARENA DI VERONA – VERONA, ITALY

SECURITY STAFF MEMBER FOR OPERA FESTIVAL – 2017 – 2021

📍 TEATRO FILARMONICO – VERONA, ITALY

SECURITY STAFF MEMBER – 12/2018 – 04/2019

● **DRIVING LICENCE**

Driving Licence: B

● **TEACHING EXPERIENCE**

31/07/2025 – 06/08/2025

Summer School on Gravitational Waves, Petnica Summer Institute, Vajevo, Serbia

Exercise sessions and supervision of student projects.