

Curriculum vitae (November 1st, 2021)

Raphaël Fabio Duque

ADDRESS	Institut für Theoretische Physik Goethe Universität Frankfurt am Main Max-von-Laue-Straße 1 60438 Frankfurt am Main	TELEPHONE	+49 (0)69 798 47848	E-MAIL	duque@physik.uni-frankfurt.de	WEBSITE	http://bandang0.github.io/rduqueonline
---------	--	-----------	---------------------	--------	-------------------------------	---------	--

RESEARCH INTERESTS

Compact object mergers, gamma-ray bursts, relativistic jets, high-energy emission processes, multi-messenger astronomy

EDUCATION

2018 – 2021	PhD in Astrophysics, <i>Sorbonne Université</i> : Doctoral thesis “Compact Object Coalescences and Gamma-Ray Bursts in the Gravitational-Wave Era” prepared at the <i>Institut d’astrophysique de Paris</i> under supervision of Prof. Frédéric Daigne and Dr. Robert Mochkovitch.
2017 – 2018	Master’s in Astronomy, Astrophysics and Space Engineering, <i>Université Paris-Diderot</i> : <i>Cum laude</i> .
2014 – 2017	Multidisciplinary Polytechnique Diploma, <i>École polytechnique</i> : <i>Prize for remarkable final internship at the European Gravitational Observatory</i> .

POSITIONS HELD

2021 – Present	Post-doctoral position at the Institute for Theoretical Physics, <i>Goethe Universität Frankfurt</i> : Under Advanced ERC project “JETSET” (PI: Prof. Luciano Rezzolla).
----------------	--

TEACHING

2018 – 2021	Master’s degree in Astronomy and Astrophysics, <i>Observatoire de Paris-Meudon</i> : Tutoring in courses “Statistical Physics”, “Astronomical Data Analysis”, “Astronomical Instrumentation and Observations”.
2018 – 2021	Public courses in General Astronomy for the <i>Explorer et Comprendre l’Univers</i> curriculum of the <i>Observatoire de Paris-Meudon</i> .

SERVICES TO THE ASTROPHYSICS COMMUNITY

since 2021	Publication refereeing: MNRAS (1).
since 2019	Burst Advocate for the <i>SVOM</i> high-energy satellite mission.
since 2019	Maintainer of the astro-reduce CCD image reducer and astrometry tool.
2018 – 2021	Co-organizer of the weekly “Multi-Messenger Astronomy Journal Club” in the Paris Area.

SEMINAR TALKS (INVITED)

November 2020	TAPIR at Caltech (Pasadena)
November 2020	Hebrew University (Jerusalem)
October 2020	Columbia University (New York City)
October 2020	Grandma Collaboration Astrophysics Seminar (Paris)
October 2020	<i>Osservatorio Astronomico di Brera</i> (Milano)
September 2020	Jagiellonian University (Cracow)
August 2018	Kavli Institute for Astronomy and Astrophysics (Beijing)

CONFERENCE TALKS

March 2021	National “Multi-messenger astrophysics” Group meeting (Paris)
October 2020	General Assembly of National Gravitational-Waves Working Group (Paris)
December 2019	Texas Symposium (Portsmouth): <i>Prize for best student talk in the “X-ray messenger” session</i>
May 2019	Nanjing GRB Conference & SVOM mission workshop (Nanjing)
March 2019	Asterics Radioastronomy Conference (Groningen)
October 2018	Eighth Fermi Symposium (Baltimore, poster)
2018 – 2021 (yearly)	“Elbereth” Conference by astronomy and astrophysics graduate students in the Paris Area

List of publications

PUBLICATIONS (REFEREED)

- A&A 652 (2021) “The potential role of binary neutron star merger afterglows in multimessenger cosmology”
Mastrogiovanni, S. ; **Duque, R.** ; Chassande-Mottin, E. ; Daigne, F. ; Mochkovitch, R.
- A& 651 (2021) “Prospects for kilonova signals in the gravitational-wave era”
Mochkovitch, R. ; Daigne, F. ; **Duque, R.** ; Zitouni, H.
- A&A 639 (2020) “Probing high-density neutron star mergers with afterglow counterparts”
Duque, R. ; Beniamini, P. ; Daigne, F. ; Mochkovitch R.
- MNRAS 492 (2020) “X-ray plateaus in gamma-ray bursts’ light curves from jets viewed slightly off-axis”
Beniamini, P. ; **Duque, R.** ; Daigne, F. ; Mochkovitch R.
- A&A 631 (2019) “Radio afterglows of binary neutron star mergers: a population study for current and future gravitational-wave observing runs”
Duque, R. ; Daigne, F. ; Mochkovitch, R.

PUBLICATIONS (NON-REFEREED)

- GCN 26386 (2019) “LIGO/Virgo S191205ah: no counterpart candidate in SVOM/GWAC observations”
- PoS 357 (2019) “Neutron star merger afterglows: population prospects for the gravitational-wave era”
Duque, R. ; Daigne, F. ; Mochkovitch, R.