

# Curriculum vitae (September 1<sup>st</sup>, 2021)

Raphaël Fabio Duque

---

ADDRESS	Institut d’astrophysique de Paris 98bis boulevard Arago 75014 Paris	TELEPHONE	+33 1 44 32 80 00	E-MAIL	duque@iap.fr	WEBSITE	<a href="http://bandang0.github.io/rduqueonline/">http://bandang0.github.io/rduqueonline/</a>
---------	---	-----------	-------------------	--------	--------------	---------	---

## 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 <b>astro-reduce</b> 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 (2019) 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.