

Clément Bonnerot

bonnerot@strw.leidenuniv.nl
<http://home.strw.leidenuniv.nl/~bonnerot>

Leiden Observatory, Niels Bohrweg 2
Oort building, office 453
2333CA Leiden
The Netherlands
+31 (0)71 527 8422
French citizenship

EDUCATION

- | | |
|---|--------------|
| Leiden Observatory
PhD in Astrophysics
Thesis: “Dynamics and Radiation from Tidal Disruption Events”
Advisors: Elena Rossi and Giuseppe Lodato | 2013-present |
| École Polytechnique Fédérale de Lausanne
Master of Science in Physics within a double degree (final grade: 5.61/6)
Thesis: “New Models for the Origin of the G2 Cloud”
Advisor: Sergei Nayakshin | 2011-2013 |
| École Centrale de Lille
Highest level French engineering school
Thesis: “The Dynamical Evolution of Young Clusters”
Advisor: Melvyn Davies | 2009-2011 |
| Lycée Janson de Sailly
Preparatory class for national competitive examination for admission to the French engineering schools
Undergraduate intensive courses in mathematics and physics (in a MP* class)
Ranked 1 st in Physics | 2006-2009 |

PUBLICATIONS AND PROCEEDINGS

1. **Bonnerot, C.**, Price D. J., Lodato, G., Rossi, E. M. “[Magnetic field evolution in tidal disruption events](#)”, 2016, submitted to **MNRAS**
2. **Bonnerot, C.**, Rossi, E. M., Lodato, G., “[Long-term stream evolution in tidal disruption events](#)”, 2016, **MNRAS**
3. **Bonnerot, C.**, Rossi, E. M., Lodato, G., “[Bad prospects for the detection of giant stars’ tidal disruption: effect of the ambient medium on bound debris](#)”, 2016, **MNRAS**, 458, 3324
4. **Bonnerot, C.**, Rossi E. M., Lodato G., Price D. J., “[Disc formation from tidal disruptions of stars on eccentric orbits by Schwarzschild black holes](#)”, 2016, **MNRAS**, 455, 2253
5. Lodato G., Franchini A., **Bonnerot, C.**, Rossi E. M., “[Recent developments in the theory of tidal disruption events](#)”, 2015, Journal of High Energy Astrophysics, 7, 158
6. Streque J., Talbi A., **Bonnerot, C.**, Pernod P., Preobrazhensky V., “[Magnetostatic micro-actuator based on ultrasoft elastomeric membrane and copper - Permalloy electrodeposited structures](#)”, 2012, in Micro Electro Mechanical Systems (MEMS), 2012 IEEE 25th International Conference on, pp. 1157–1160

GRANTS AND AWARDS

- | | |
|--|--------------|
| LKBF grant (500 €) | October 2016 |
| Selected as junior scientist in the International Space Science Institute TDE team | June 2016 |
| LKBF grant (1150 €) | April 2016 |
| LKBF grant (550 €) | October 2015 |

Poster prize at the 70th Netherlands Astronomy Conference	May 2015
SHS prize for the essay “Space-Time Substantivalism and the Hole Argument” (250 CHF)	September 2013
Selected for a PhD position at Leiden Observatory	March 2013
Finalist of the IEEE Region 8 Student paper contest	November 2011
Selected for a double degree program at EPFL	June 2011

TALKS AND CONFERENCES

“Flash talk”, University of Santa Cruz - Invited talk	October 2016
“CTC theory lunch talk”, University of Maryland - Invited talk	October 2016
“High-energy group meeting”, Columbia University - Invited talk	September 2016
“CAS wine and cheese seminar”, Johns Hopkins University - Invited talk	September 2016
“Galaxy and Cosmology seminar”, Harvard University - Invited talk	September 2016
“Lunch talk”, Leiden Observatory - Invited talk	September 2016
“Astro-coffee seminar”, Monash University - Invited talk	May 2016
“Jerusalem TDE Workshop”, Jerusalem - Contributed talk	November 2015
“Galactic nuclei at high resolution in many dimensions”, Alájar - Contributed talk	October 2015
“First Stars, Galaxies and Black Holes: Now and Then”, Groningen - Poster presentation	June 2015
“70th Netherlands Astronomy Conference”, Nunspeet - Poster presentation	May 2015
“20th Symposium on Astroparticle Physics”, Nijmegen - Contributed talk	March 2015
“Compact Objects as Astrophysical and Gravitational Probes”, Leiden	February 2015
“NOVA Network-3 Meeting”, Leiden - Contributed talk	November 2014
“NL Accretion & Jets Theory Meeting”, Nijmegen - Contributed talk	October 2014
“Growth and Evolution of the Milky Way’s Nuclear Star Cluster and its Central Black Hole”, Alájar	September 2014
“Tidal disruption events and AGN outbursts workshop”, Madrid	June 2012

ACADEMIC SERVICE

Referee for the Monthly Notices of the Royal Astronomical Society	2016-present
Referee for the Astrophysical Journal	2016-present
Organizer of the PhD talks at Leiden Observatory	2014-2015

TEACHING AND SUPERVISION

Supervision of PhD student Zujia Lu	2016-present
Supervision of bachelor student Paul Couzy for his thesis “Accretion disc behaviour around a supermassive black hole”	Summer 2016
Lecture on the SPH numerical technique to master students at Leiden Observatory	April 2016
Teaching assistant for the master course “Computational Astrophysics”	Spring 2016
Teaching assistant for the master course “Stellar Structure and Evolution”	Spring 2015
Teaching assistant for bachelor students in Physics at EPFL	2011-2012

PROGRAMMING SKILLS

Expertise in a variety magneto-hydrodynamics, radiative transfer, N-body and stellar evolution codes (PHANTOM, SPHNG, GASOLINE, NBODY6, MESA)
Knowledge of the programming languages Fortran 90, C, Mathematica and Python

LANGUAGES

French - native language
English - advanced level
German - intermediate level