lleyk El Mellah

http://homes.esat.kuleuven.be/~ileyk

Research

Since 2016	FWO [Pegasus] ² Marie Skłodowska-Curie fellowship with Rony Keppens Center for mathematical Plasma Astrophysics - KU Leuven
2013-16	PhD with Fabien Casse & Andrea Goldwurm Wind accretion onto compact bodies - APC, Paris Diderot University
2011-12	One-year volunteer internship supervised by Saul Rappaport on <i>Monitoring of close-in binaries and short period exoplanets with Kepler</i> Kavli Institute for Astrophysics - MIT
Ap-Ag 2010	BSc internship supervised by Jean-François Lestrade on Gravitational perturbations of debris discs by a passing-by star LESIA - Paris Observatory
Jn-Jl 2009	BSc internship supervised by Gérard Belmont & Patrick Robert on Resampling of the CLUSTER satellites data Plasma Physics Laboratory - Paris

Education

2013-16	PhD with Fabien Casse & Andrea Goldwurm - Paris Diderot University Wind accretion onto compact bodies
2012-13	Master degree in Astrophysics, with distinction - Paris Observatory
2010-12	Normalien at the Ecole Normale Supérieure of Cachan
2011-12	Research internship and graduate courses - MIT, Cambridge
2010-11	French Agrégation of Physics & Chemistry - ENS of Cachan, FR Rank : 2 nd in 1,409 candidates
2008-10	Bachelor degree in Fundamental Physics, with honours - ENS
2006-08	Preparatory classes to Grandes Ecoles - Lycée Janson-de-Sailly, Paris

Grants & awards

2016	3-years FWO [Pegasus] ² Marie Skłodowska-Curie fellowship
2013-16	3-years PhD fellowship from the Ecole Normale Supérieure of Cachan
2013-16	3-years teaching assistant grant from the Université of Paris 7 Diderot
2011	French Agrégation of Physics and Chemistry
2010-12	2-years <i>normalien</i> study fellowship from the ENS of Cachan

Computing & observing time

2018	XMM-Newton proposal <i>Mapping the wind and accretion in Vela X-1</i> (co-l.)
2017-18	Computing time on the Flemish Tier-1 VSC cluster : 2.5 Mh·cpu
2015-16	Computing time on the French CINES Tier-1 cluster : 600 kh·cpu
2012	1-week observing time at the Mont Mégantic Observatory (Canada)

Supervision & teaching

Supervision 2018 2018 2018 2018	Co-supervisor with Jon Sundqvist of a graduate student, Nicolas Moens Member of the supervisory committee of a graduate student, Luka Poniatowski Reader for Florian Driessen's Master thesis supervised by Jon Sundqvist Reader for Prem Kumar Bulusu's Master thesis supervised by Hugues Sana
Teaching	
2018-19	Lecturer in Computational methods for Astrophysics, 5 th year - KU Leuven
2017-18	Teaching assistant (TA) Linear Algebra, 1 st year - KU Leuven
2016-17	TA Computational methods for Astrophysics, 5 th year - KU Leuven
2014-16	TA Classical Mechanics, 1 st year - Univ. of Paris 7 Diderot
2013	TA Physics for Medical studies, 1 st year - Univ. of Paris 7 Diderot
2013	TA Deterministic systems and signals, 4 th year - Univ. of Paris 7 Diderot
2012-13	Private lessons with the company Cours Thalès - Paris
2011	French Agrégation of Physics & Chemistry
2009-10	High school Gustave Eiffel - Cachan

Community service

Reviewing 2018 2018	Reviewer for The Astrophysical Journal Reviewer for DiRAC High Performance Computing Tier-1
Outreach	
Oc 2017	1h30 radio interview on scientific communication in Faconde - Brussels
Nv 2015	Community manager and webmaster of the Young Physicists Meeting - Paris
Oc 2015	Festival of Science - Paris Diderot University
Sp 2015	3D-printed models and Wolfram interactive applet for the Roche potential
2013	Java applet on Turing theory of morphogenesis - Paris Observatory