Ileyk 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** ***Monitoring of close-in binaries and short period exoplanets with Kepler*** 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 : 2nd 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 *normalien* study fellowship from the ENS of Cachan

Computing & observing time

2018	XMM-Newton proposal *Mapping the wind and accretion in Vela X-1* (co-I.)
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-...	Co-supervisor with Jon Sundqvist of a graduate student, Nicolas Moens
2018-...	Member of the supervisory committee of a graduate student, Luka Poniatowski
2018	Reader for Florian Driessen's Master thesis supervised by Jon Sundqvist
2018	Reader for Prem Kumar Bulusu's Master thesis supervised by Hugues Sana

Teaching

2018-19	Lecturer in Computational methods for Astrophysics, 5th year - KU Leuven
2017-18	Teaching assistant (TA) Linear Algebra, 1st year - KU Leuven
2016-17	TA Computational methods for Astrophysics, 5th year - KU Leuven
2014-16	TA Classical Mechanics, 1st year - Univ. of Paris 7 Diderot
2013	TA Physics for Medical studies, 1st year - Univ. of Paris 7 Diderot
2013	TA Deterministic systems and signals, 4th 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

2019	Reviewer for Astronomy & Astrophysics
2018	Reviewer for The Astrophysical Journal
2018	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