



Prof. Frédéric COURBIN
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EDUCATION AND EMPLOYMENT HISTORY

ICREA RESEARCH PROFESSOR (WEB LINK)	2024-present / Spain
ADJUNCT PROFESSOR, EPFL	2017-2024 / Switzerland
TENURED SENIOR SCIENTIST (MAÎTRE D'ENSEIGNEMENT ET DE RECHERCHE, MER), EPFL	2009-2016 / Switzerland
SENIOR SCIENTIST, EPFL	2004-2009 / Switzerland
MARIE CURIE INDIVIDUAL FELLOWSHIP, ASTROPHYSICS INSTITUTE, UNIVERSITY OF LIÈGE	2002-2004 / Belgium
POSTDOCTORAL FELLOW AT UNIVERSIDAD CATÓLICA DE CHILE (JOINTLY WITH ESO)	1999-2002 / Chile
PHD THESIS IN ASTROPHYSICS (HIGHEST HONORS), UNIVERSITY OF LIÈGE OPTIMAL IMAGE DECONVOLUTION AND COMBINATION: APPLICATION TO THE CASE OF STRONG GRAVITATIONAL LENSING PHD ADVISOR: PROF. P. MAGAIN	1996-1999 / Belgium
ESO STUDENTSHIP AND FRENCH MILITARY SERVICE, GARCHING, GERMANY	1995 / Germany
UNIVERSITÉ PIERRE ET MARIE CURIE, PARIS-VI MASTER II (DEA) IN ASTROPHYSICS	1994 / France
UNIVERSITÉ PARIS-XI, ORSAY "MAGISTÈRE DE PHYSIQUE FONDAMENTALE", JOINTLY WITH ENS CACHAN	1993 / France

INSTITUTIONAL RESPONSIBILITIES

MEMBER OF THE EPFL SCHOOL ASSEMBLY	2020 - 2021
MEMBER OF THE EPFL SCHOOL COUNCIL FOR BASIC SCIENCES	2018 - 2021
FACULTY MEMBER OF THE EPFL PHYSICS INSTITUTE - IPHYS	2017 - present
GRADUATE STUDENT MENTOR FOR THE PHYSICS DOCTORAL SCHOOL - EDPY	2009 - present
MEMBER OF THE COMMITTEE OF THE EPFL DOCTORAL SCHOOL IN PHYSICS - EDPY	2009 - present

APPROVED RESEARCH PROJECTS (ONGOING)

AEI "CONSOLIDACION" GRANT (200 KEUROS)	2024-2026
AEI "CONOCIMIENTO" GRANT (190 KEUROS)	2026-2029
ERC SYNERGY GRANT REDH0T (12MEUROS INCL. 3.2 MEURO FOR MY GROUP)	2025
ERC ADVANCED GRANT COSMICLENS (WEB LINK)	2018 - 2023
SNSF-SINERGIA <i>Euclid: high-precision cosmology in the dark sector</i>	2021 - 2025
SNSF <i>Strong gravitational lensing with wide field and time-domain surveys</i>	2021 - 2025

SUPERVISION OF JUNIOR RESEARCHERS

ADVISOR OR CO-ADVISOR OF MORE THAN 60 MASTER STUDENTS	2004-present
ADVISOR OR CO-ADVISOR OF 17 PHD STUDENTS	2004-present
TRAINED 12 POSTDOCS, INCL. 1 MARIE CURIE FELLOW	2004-present

PRIZES AND AWARDS

ERC SYNERGY GRANT REDH0T (12MEUROS INCL. 3.2 MEURO FOR MY GROUP)	2025
ERC ADVANCED GRANT COSMICLENS (3.2 MEURO)	2018
MARIE CURIE INDIVIDUAL FELLOWSHIP	2002
BOELPAEPE PRIZE IN SIGNAL PROCESSING - ROYAL ACADEMY OF SCIENCE, BELGIUM	1999
ESO STUDENTSHIP (GARCHING)	1995

ACTIVE MEMBERSHIPS IN SCIENTIFIC SOCIETIES

MEMBER OF THE INTERNATIONAL ASTRONOMICAL UNION (IAU)	2004 - present
MEMBER OF THE SWISS SOCIETY FOR ASTROPHYSICS AND ASTRONOMY (SSAA)	2004 - present

LANGUAGES

ENGLISH (FLUENT) - SPANISH (FLUENT) - FRENCH (MOTHER TONGUE) - GERMAN (BASIC LEVEL)

TEACHING ACTIVITIES

MOOC INTRODUCTION TO RADIO-ASTRONOMY (PARTS I & II) *from 2020*
• This MOOC started on Oct 1, 2020, in collaboration with Prof. J.-P. Kneib and colleagues from the Square Kilometer Array in South Africa. Part II will be released in the spring 2021.

MOOC INTRODUCTION TO ASTROPHYSICS *2014 - present*
• Bachelor level. Over 50'000 students from 136 countries. Since 2017, this MOOC is accessible "on demand" in French and in English. This MOOC covers part of my EPFL Bachelor course (see below). A [BOOC](#) is also associated to this MOOC and freely available in French and English.

DARK AND VISIBLE MATTERS (10 STUDENTS/Y) - DOCTORAL LEVEL *2010 - present*
• Also given twice in the framework of the inter-universities CUSO program.

INTRODUCTION TO ASTROPHYSICS (150 STUDENTS/Y) - BACHELOR LEVEL *2007 - present*

ASTROPHYSICS PRACTICAL WORKS (10 STUDENTS/Y) - MASTER LEVEL *2007 - present*

OUTREACH AND EVENTS (AMONG MANY)

REGULARLY INVITED FOR RADIO AND TV SHOWS

PARTICIPATING IN MANY AMATEUR ASTRONOMY EVENTS, GIVING POPULAR SCIENCE TALKS

PARTICIPATION IN THE TV SHOW L'ESPRIT SORCIER *2019*
• Done in the context of the EPFL open days at STCC

WROTE AND PRODUCED THEATER PLAY "POUSSIÈRE D'ÉTOILE" - GENEVA, SWITZERLAND *2009-2010*
• This was written for the year of astronomy in 2009. The play was given over 2 weeks in Geneva, gathering a large number of schools in the area.

ORGANISATION OF OBSERVING SESSIONS WITH DISABLED CHILDREN (INCLUDING MINE!) *from 2010*

MEMBERSHIP OF PANELS, BOARDS

MEMBER OF THE SPANISH-LED ESA ARRAKHS MISSION (LEADING THE IMAGE DECONVOLUTION WORK) *from 2023*

ON THE BOARD OF THE EUROPEAN PROJECT TITAN ON ASTROPHYSICAL SIGNAL PROCESSING (PI: J.-L- STARCK) *2023-2027*

SWISS REPRESENTATIVE ON THE ESO STC (SCIENTIFIC AND TECHNICAL COMMITTEE) *from 2022*

MEMBER OF THE ISSI SCIENCE COMMITTEE (INTERNATIONAL SPACE SCIENCE INSTITUTE IN BERN) *from 2020*

MEMBER OF THE LSST CONSORTIUM *from 2020*

ERC PANELS INFRAIA, INFRAINNOV, INFRASUPP *2020*

ACQUIRED THE "BUILDER" STATUS IN THE ESA EUCLID MISSION *2020*

MEMBER OF THE SNSF AMBIZIONE PANEL *2018 - present*

MEMBER OF THE FRENCH ANR EVALUATION COMMITTEE *2017 - 2019*

MEMBER OF THE FRENCH HCERES EVALUATION COMMITTEE *2014*

MEMBER OF THE ESO OBSERVING PROGRAM COMMITTEE (OPC) *2013-2014*

REVIEWER FOR ERC ADVANCED AND STARTING GRANTS *2013 - present*

ESA EUCLID MISSION: CO-LEAD OF OU-SHE (SHEAR MEASUREMENTS) *2011-present*

ESA EUCLID MISSION: RESPONSIBLE FOR ALL STRONG LENSING PIPELINES *2011-present*

SWISS REPRESENTATIVE AT THE ESO USERS COMMITTEE *2006-2009*

MEMBER OF THE HST TIME ALLOCATION COMMITTEE *2004-2005*

PUBLICATION RECORD

I have published so far 544 papers, out of which 316 are in refereed journals and 45 in press in refereed journals. This led so far to 23605 citations and an h factor of h=73 according to google scholar. [ORCID: 0000-0003-0758-6510](#)