

# Dr Laurent EYER

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## EDUCATION

- 1998: **PhD**, University of Geneva  
- Subject: Analysis of data of the Hipparcos satellite (European Space Agency)
- 1996: **Astrophysicist**, University of Geneva  
- Astronomy and astrophysics certificate
- 1989: **Physicist**, Swiss Federal Institute of Technology of Lausanne, EPFL  
- Subject: The mass of the gluon in a model of quantum chromodynamics

## PROFESSIONAL EXPERIENCE

- 2009-present: **University of Geneva**, “Maître d’Enseignement et de Recherche” (MER)  
- Leads the “variability processing and analysis” activities of the [Gaia](#) space mission (leads a group of 8 people at the Department of Astronomy-UniGE and of 60 scientists/software engineers spread in 14 countries)  
- Has supervised/co-supervised 6 PhD students  
- Teaches astronomical photometry, variable stars and astro-statistics to graduate, postgraduate students, coordinate projects for school students  
- Writes articles (20 as 1st author, 110 as coauthor) and edit 2 books (in 2012 and 2015)  
- Performs Public Outreach (interviews on the radio, television and in newspapers)
- 2002-2008: **University of Geneva**, “Physicien spécialisé”  
- Led the Gaia Variable Star Working Group, then managed the “variability processing and analysis” activities of the Gaia space mission  
- Wrote articles (9 as first author, 21 as coauthor)
- 2000-2002: **Princeton University (USA)**, SNF advanced researcher  
- Analyzed and classified data of ASAS, SDSS, OGLE photometric surveys  
- Managed the OGLE data of 1.5 Terabytes size  
- Wrote articles (3 as first author, 12 as coauthor)
- 1998-2000: **Catholic University of Leuven (Belgium)**, Researcher  
- Led (Principal Investigator) a South African - Belgian project  
- Analyzed photometric and spectroscopic time series of variable stars  
- Estimated the impact of space missions in variable star research  
- Wrote articles (8 as first author, 3 as coauthor)
- 1991-1998: **University of Geneva**, Researcher and assistant  
- Managed, controlled and analyzed data of the ESA Hipparcos space mission, developed mathematical and statistical tools, negotiated and finalized the content of the Hipparcos catalogue  
- Wrote articles (4 as first author, 4 as coauthor)  
- Performed Public Outreach (participation in Heureka exhibition in Zürich)
- 1990-1991: **Swiss Federal Institute of Technology of Lausanne (EPFL)**, “Assistant” in mathematics  
- Gave exercises and lectures for students of interdisciplinary domains

## RESEARCH INTERESTS

Variable phenomena in the Universe: pulsating stars, binary stars, quasars, transients  
The Galactic structure  
Statistics, machine learning technics, time domain astronomy, time series analysis  
Exploitation of Large scale surveys: Gaia, Hipparcos, LSST, OGLE, ASAS, SDSS

## SCIENTIFIC INVITATIONS

University of Oxford, UK, 3 weeks, 2017-2019  
Princeton University, USA, 18 weeks, 2003-2007, 2012-2017  
IUCAA, India, 1 week, 2014  
California Institute of Technology, USA, 1 week, 2011  
University of Berkeley, USA, 1 week, 2011  
University of Zagreb, Croatia, 2 weeks, 2010  
University of Florida, USA, 1 week, 2009  
University of Washington, USA, 2 weeks, 2008  
Catholic University of Leuven, Belgium, 4 weeks, 1997-2004  
Massachusetts Institute of Technology, USA, 2 weeks, 1998  
Côte d'Azur Observatory, France, 2 weeks, 1994

## ASTRONOMICAL OBSERVATIONS

Roque de los Muchachos Observatory, La Palma, Spain, 4 weeks, 2009-2010, 2019  
European Southern Observatory, Paranal, Chile, 1 week, 2015  
South African Astronomical Observatory, South Africa, 7 weeks, 1999-2000  
Junfrauoch Observatory, Switzerland, 1 week, 1998  
European Southern Observatory, La Silla, Chile, 9 weeks, 1992-2000

## OTHER: ACHIEVEMENTS, MEMBERSHIP

Leader for science funds (UniGE) during the period 2006-2019 amounting to more than 14 million Swiss Francs ( $> 12 \cdot 10^6$  EUR)  
Organiser/Co-organiser of more than 40 international meetings/PhD Schools  
Member/Past-member of 3 commissions of the International Astronomical Union Member  
Member of the Swiss Society for Astrophysics & Astronomy and European Astronomical Society

## LANGUAGES

French: mother tongue  
English: excellent knowledge  
German: basic spoken and written knowledge  
Dutch: elementary knowledge (courses at the "Instituut voor Levende Talen", Leuven)

## HOBBIES

Music: Pianist (interpret of Bach, Beethoven, Chopin), Opera fan, Singer at the Lausanne University Choir (Concerts abroad: Budapest/Hungary 2014, Vilnius/Lithuania 2016 and New York/USA 2017)  
Literature: Passionate reader of classics, fictions, theatre, and science books  
Sports: Hikes (Alaska, Lapponia, Patagonia, Alps), jogging, tennis, ping-pong, swimming  
Finances: Treasurer of SPHN (Société de Physique et d'Histoire Naturelle) 2002-2017  
Auditor of the Lausanne University Choir accounting in 2011