Eric Gosset

Personal information

Name: Eric Gosset Birth date: 08/04/1956

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Current research group

3 Permanent Researchers, 3 Post-Docs, 4 PhD students.



Expertise – Experienced observer in the field of massive stars (in particular O, Wolf-Rayet and Luminous Blue Variables) with extensive expertise in photometry and spectroscopy; particularly active in the field of binary and multiple stars. Expert in observation reduction techniques: time series analysis, wavelet decomposition, spectral disentangling, statistics, multiwavelength studies,... Measurements of fundamental properties of massive single and multiple stars with the aim to test current theories of massive star formation and evolution. High energy astrophysics and colliding wind binaries. Spatial distribution of quasars.

Education

 2007: Agrégation de l'Enseignement Supérieur, i.e. Dr.Sc. in Astrophysics, Habilitation Thesis and Accreditation for University Level Professorship, University of Liège, Belgium. Grade: «Unanimité - Unanimity»

Title: Etudes d'étoiles massives de types spectraux O, Wolf-Rayet et apparentés. Résultats de campagnes d'observations photométriques et spectroscopiques dans le domaine visible et dans le domaine des rayons X.

- 1987: PhD in Astrophysics, University of Liège, Belgium.
 - Grade: "Plus Grande Distinction Summa cum Laude"

Title: Analyse de nuages de points. Applications astronomiques et études de la distribution spatiale des quasars.

- 1979: Accreditation for high-school teaching (AESS in Physical Sciences), Liège University, Belgium
- 1978: Licence (now Master) in Physical Sciences, Liège University, Belgium. Grade: "Grande Distinction Magna cum Laude"
 - Title: Etude en absorption de la transition A ${}^{3}\Pi_{inv}$ X ${}^{3}\Sigma^{-}$ du radical libre PH
- 1976: Candidature (now Bachelor) in Physical Sciences, Liège University, Belgium.

Positions

- 2008-current: Maître de Conférence, University of Liège, Belgium.
- 2008-current: F.R.S.-FNRS Senior Research Associate, University of Liège, Belgium.
- 1993-2007: F.R.S.-FNRS Research Associate, University of Liège, Belgium.
- 1991-1992: Externally paid Associate, University of Liège, Belgium.
- 1988-1990: Post-Doc Fellowship at the European Southern Observatory Headquarter in Garching bei München, Germany (introducing astronomer at the remote control facility).

Summary of publications and conference contributions – 105 papers in international high-rank peer-reviewed journals; some 100 non-peer reviewed publications; 1 paper in Science as seventh author (most cited Science and Nature paper of the year); total 3733 citations. Hirsch-Index: 32 (adsabs.harvard) or 35 (google scholar).

Membership to scientific organisations

- Member of the International Astrophysical Union (since 1991)
- Member of the European Astronomical Society (since foundation)
- Member of the Royal Society for Sciences of Liège (since 2007)
- Member of the Belgian National Committee for Astronomy

Scientific prizes and awards

- 2004-2007: Prize Edouard Mahy (28th quadriennial) of the Royal Academy of Sciences
- 1992: Laureate of the National Contest of the Royal Academy of Sciences with a 184 page memoir entitled: Etude de la variabilité des étoiles de type Wolf-Rayet.
- 1988-1990: Triennial Grant from Foundation Agathon De Potter (Royal Academy of Sciences).
- 1985-1987: Grant from Foundation Mathieu and from Foundation Liégeois (Liège University and Royal Academy of Sciences, respectively)
- Grant from Foundation Agathon De Potter (Royal Academy of Sciences)

Summary of research funding

- 2012-2014: Principal investigator of the Post-Doc position of Thierrry Semaan (Post-Doc In, Communauté Française de Belgique).
- 2014-2017: Co-promotor of the F.R.S.-FNRS Post-doctoral Research grant of Laurent Mahy.
- 2010-current: Member of the TIGRE consortium (exploitation of a 1.2m telescope in collaboration with Hamburg Observatory and Guanajuato University).
- 2013-2018: Co-Investigator of an ARC grant (796000 euros).
- 2016-2018: Principal Investigator ULg (Belgian co-I) of the PRODEX contract Gaia Early Mission consolidation part II (318885 euros).
- 2014-2016: Principal Investigator ULg (Belgian co-I) of the PRODEX contract Gaia Early Mission consolidation (623595 euros).
- 2006-2013: Principal Investigator ULg (Belgian co-I) of the PRODEX contract Gaia-DPAC: binaries, extreme stars and solar system objects (599923 euros).
- 2009-current: Promotor of the F.R.S.-FNRS Research Associate Grant of Yaël Nazé.
- 2006-2008: Principal Investigator of a Research Grant from Liège University related to the preparation of the scientific software of ESA's Gaia mission (121000 euros).
- 1994-2000: Co-investigator of an Action de Recherches Concertée.

Access to large infrastructures – Regular use of various ground-based and space-borne astrophysical observatories (mainly European Southern Observatory, Cerro Tololo Observatory, Haute-Provence Observatory, XMM-Newton facility, Chandra facility, Swift facility, CoRoT facility).

International collaborations

- *The Gaia-ESO survey:* ground based support and preparation to the Gaia mission. Some 300 VLT nights attributed. We are part of the massive star working group;
- The XMM-Newton Large Scale Structure Survey: Large X-ray survey founded on the XMDS (see below), the consortium involves 27 institutes. We are a founding member of the project.
- *The XMM-Newton Medium Deep Survey:* X-ray survey, consortium CEA-Saclay-Milan-Liège. We are a founding member of the project.
- The Gaia Data Processing and Analysis consortium: membership of Coordination Unit 4 and 6; Leader of Development Unit DU434 in CU4.

Supervision and Teaching – Supervision of 5 Post-Doctoral grants. Supervision (and cosupervision) of 5 PhD thesis students. Member of 1 Habilitation thesis jury and of 13 PhD thesis jurys. Teaching at master and third cycle level at Liège University.

Main organiser of scientific meetings

- Member of the Scientific Organising Committee (SOC) and/or LOC of 6 Liège International Astrophysical Colloquia (LIAC24-1983, LIAC30-1992, LIAC31-1993, LIAC33-1996, LIAC36-2001, LIAC39-2010).
- Chair of 2 Gaia workshops.

Institutional responsibilities

- 2016-current: Member of the Council of the newly created research unit "Space Sciences, Technologies, and Astrophysics Research Institute".
- 2002-current: Council Member of the Faculty of Sciences.
- 2002-2004: Scientific representative at the Council of the Science Library of the Liège University.
- 1996-current: Member of the Council of Studies.
- 1991-current: Council member of the Liège Astrophysical Department.

Service work in Commissions of Trust

- Member of the XMM-Newton Observing Time Allocation Committee (AO4/2004).
- Reviewer for international peer-reviewed journals (A&A, MNRAS, ApJ).

International & Science Policy Functions

- 1996-current: Member of the Belgian National ESO Committee (BNEC).
- 2010-current: Member of the Belgian National Committee for Astronomy.
- 2014: Member of the massive stars working group in Arago Science team (ESA M4/M5 candidate mission).
- 2013: Member of the white paper writers in support of Athena+ (ESA L2/L3).
- 2012-2016: Member of the Gaia-ESO survey consortium for massive stars.
- Since 1996: Member of the Gaia Data Processing and Analysis Consortium; head of the Development Unit 434 (spectroscopic binaries, CU4).
- 1999-2012: Founding member of the XMM-Newton Median Deep Survey consortium and of the XMM-Newton Large Scale Structure survey consortium.
- 1992-1999: Member and steering committee member of the Optical Monitor consortium on-board the XMM-Newton satellite. Calibration team of the OM.
 Discussion and setting-up of the XMM-Newton Guaranteed Time scientific program.

Outreach activities

- Supervision of the restoration of the Great Meridian Circle of Liège Observatory.
- Organisation of numerous visits of the Old Observatory at Cointe.
- Various organisations of open doors and outreach activities.