CURRICULUM VITAE

Dr. Thierry Morel Université de Liège

Institut d'Astrophysique et de Géophysique Allée du 6 Août, 19c (Bât. B5c), Belgium

Office number: B5c + 1/14

Phone: +32 (0)4 366 9766 Fax: +32 (0)4 366 9746 e-mail: tmorel@uliege.be

URL: http://www.astro.ulg.ac.be/~morel

55 years old, male, single, French citizen

National service: 1991–1992

French English Italian

Language skills

Communication		Comprehension	
Oral	${\bf Written}$	Oral	$\mathbf{Written}$
Mother tongue		Mother tongue	
good	very good	very good	very good
good	good	very good	very good

Present position

Since 2007 December

ESA-Belspo Fellow (ULg, Liège, Belgium)

Coordinator of PLATO working group "WP122: Non-seismic diagnostics and model atmospheres".

Coordinator of PLATO working group "WP351100: Interface WP12-WP35".

Member of PLATO Stellar Science Office.

Belgian co-PI of Belspo's contract "PLATO mission development".

Member of Gaia Data Processing and Analysis Consortium (GAIA-DPAC).

PI of ESO Large Program "Magnetic fields in OB stars".

Member of Gaia-ESO Survey Consortium; head of Liège working group.

Co-supervision of a PhD student (C. Cazorla).

Previous positions

2007

Postdoctoral Fellow (KU Leuven, Belgium)

Abundance analysis of pulsating B-type stars (β Cephei, SPBs).

Supervision of trainees.

2004 – 2006

ESA postdoctoral external fellow (KU Leuven, Belgium)

Preparation of the CoRoT (COnvection ROtation and planetary Transits) mission.

Abundance analysis of pulsating B-type stars (β Cephei, SPBs).

2004 July-October

Scholarship holder from the Italian Space Agency (Palermo Observatory, Italy)

Optical classification of X-ray sources detected in the ROSAT

North Ecliptic Pole (NEP) Survey.

2002 - 2004

Marie Curie Postdoctoral Fellow (Palermo Observatory, Italy)

Determination of the photospheric abundances of active binaries (RS CVn systems).

Study of the large-scale structure of early-type stellar winds.

Supervision of trainees.

Previous positions

(continued)

2000-2002

Postdoctoral Fellow (IUCAA, Pune, India)

Search for counterparts of high-mass X-ray binaries.

Analysis of near-IR line-imaging observations of supernova remnants.

1998 - 2000

TMR Research Assistant (Imperial College, London, UK)

Follow-up study of extragalactic infrared sources detected in the course of the European Large Area ISO Survey (ELAIS); study of their infrared colours.

Bursary holder of the EC program: "Training and Mobility of Researchers (TMR)".

In charge of 2nd year tutorials.

Education

1994 - 1998

Ph.D. (University of Montréal, Canada)

Title: "On the nature of the spectral and photometric periodic

variability of apparently single Wolf-Rayet stars".

Thesis supervisor: Dr. N. St-Louis (University of Montréal).

1992 - 1993

Diplôme d'Etudes Approfondies (M.Sc.) (Strasbourg Observatory,

France)

"Analysis and processing of astrophysical data".

Postgraduate scholarship holder from the French ministry of research.

1990-1991

Maîtrise de physique (B.Sc.) (University of Picardie, Amiens, France)

Training courses

1993 November-1994 March

"He III regions and Wolf-Rayet stars: a study of Br 2".

Strasbourg Observatory, France.

Under the management of Dr. M. Pakull.

1993 April-June

"Monte-Carlo simulations of the diffusion in Neptune's atmosphere".

Bordeaux Observatory, France.

Under the management of Prof. J.-P. Parisot.

SOC member

Various PLATO conferences or workshops

EWASS2015 Sp8, "The physics of fossil stellar magnetism", 23 June 2015,

La Laguna, Canary Islands, Spain.

Spring School of Spectroscopic Data Analyses, 8-12 April 2013, Wroclaw, Poland.

PhD jury member

Karolien Lefever (KU Leuven, Belgium, 2007):

"Fundamental parameters of B-type stars"

Sébastien Salmon (ULg, Belgium, 2014):

"Impact of micro-physics and macro-physics on the seismic properties of main-sequence B-type stars"

Constantin Cazorla (ULg, Belgium, 2017) - co-promotor:

 $"Abundance\ determination\ in\ massive\ stars:\ challenges\ for\ mixing\ processes"$

Anthony Salsi (OCA, Nice, France, 2021):

"Etalonnage de la relation brillance de surface-couleur : distance des binaires à éclipses dans le Groupe Local et préparation de la mission PLATO"

Allocated time on telescopes and observational experience

Optical spectroscopy:

University of Toronto Southern Observatory (Chile, 0.6 m) — 21 nights.

Mount Mégantic Observatory (Canada, 1.6 m) — 20 nights.

Vainu Bappu Observatory (India, 1.0 m) — 14 nights + service observing.

European Southern Observatory (Chile, 3.6 m) — 16 nights

Nordic Optical Telescope (Spain, 2.6 m) — 6 nights + service observing.

San Pedro Mártir Observatory (Mexico, 2.1 m) — 4 nights.

European Southern Observatory (Chile, 2.2 m) — 2 nights + service observing.

OHP (France, 1.9m) — 7 nights + Service observing.

VLT (Chile, 8.2 m) — Service observing.

WHT (Spain, 4.2 m) — Service observing.

TNG (Spain, 3.6 m) — Service observing.

SAAO (South Africa, 1.9 m) — Service observing.

Asiago Observatory (Italy, 1.8 m) — Service observing.

Optical/near-infrared photometry:

San Pedro Mártir observatory (Mexico, 0.8 m) — 22 nights.

Mercator Telescope (Spain, 1.2 m) — 23 nights.

TCS (Spain, 1.5 m) — Service observing.

Near-infrared imaging:

Canada-France-Hawaii Telescope (USA, 3.6 m) — 7 nights.

United Kingdom Infrared Telescope (USA, 3.8 m) — 2 nights.

TCS (Spain, 1.5 m) — Service observing.

Near-infrared spectroscopy:

United Kingdom Infrared Telescope (USA, 3.8 m) — Service observing.

Circular spectropolarimetry:

European Southern Observatory (Chile, 3.6 m at La Silla + VLT) — 35.5 nights (6 as observer)

Publications

(see attached list)

133 publications in refereed journals.

22 as principal investigator.

71 publications in conference proceedings.

28 as principal investigator.

Communications

2016-now | Numerous talks during PLATO conferences and workshops.

September 2016 | Annual Meeting of the German Astronomical Society, Bochum, Germany (talk).

June 2015 | EWASS2015, La Laguna, Canary Islands, Spain (talk).

May 2015 | Massive Stars and the Gaia-ESO Survey, Brussels, Belgium (talk).

December 2014 | PLATO 2.0 Science conference, Taormina, Italy (poster).

November 2014 | Gaia-ESO survey second science meeting, Porto, Portugal (poster and talk).

June 2014 | IAUS 307, New windows on massive stars, Geneva, Switzerland (poster and talk).

July 2013 | PLATO 2.0 Science workshop, Noordwijk, The Netherlands (talk).

July 2013 | Asteroseismology of stellar populations in the Milky Way, Sesto, Italy (talk).

June 2013 | Massive Stars: from α to Ω , Rhodes, Greece (poster).

March 2013 | 11th COROT week, Tenerife, Spain (poster).

July 2012 | Ageing low-mass stars: from red giants to white dwarfs, Liège, Belgium (poster).

April 2012 | GAIA-ESO survey, WG10 and WG11 Joint meeting, Nice, France (talk).

November 2011 | Seminar, The Open University, UK (talk).

Communications (continued) July 2011 July 2011

July 2011 | 2nd CoRoT meeting, Marseille, France (poster).

July 2011 | Four decades of research on massive stars, Saint-Michel-des-Saints, Canada (talk).

June 2011 | Stellar atmospheres in the GAIA era workshop, Bruxelles, Belgium (poster).

February 2011 | PLATO Science conference, Berlin, Germany (talk).

July 2010 | Active OB stars: structure, evolution, mass loss and critical limits, Paris, France (poster).

November 2009 | Seminar, Wroclaw Astronomical Institute, Poland (talk).

October 2009 | Biennial meeting of the German Amateur Astronomy Association (talk).

July 2008 Invited review at conference "Evolution and Pulsation of Massive Stars on the Main Sequence and Close to it", Liège, Belgium (talk).

May 2008 | Seminar, Institute of Physics of Zagreb, Croatia (talk).

Avril 2008 | Seminar, Université de Liège, Belgium (talk).

November 2007 | 12th Belgian Asteroseismology Group workshop, Leuven, Belgium (talk).

August 2007 | Helioseismology, asteroseismology and MHD connections, Göttingen, Germany (poster).

July 2007 | Unsolved problems in stellar physics, Cambridge, UK (posters).

June 2007 | 11th Belgian Asteroseismology Group workshop, Liège, Belgium (talk).

September 2006 | Vienna workshop on the future of asteroseismology, Vienna, Austria (poster).

September 2006 | Precision spectroscopy in astrophysics, Aveiro, Portugal (poster).

December 2005 | 9th COROT week, ESTEC, The Netherlands.

June 2005 | Close binaries in the 21st century, Syros, Greece (poster).

May 2005 | 8th COROT week, Toulouse, France (poster).

December 2004 7th COROT week, Granada, Spain.

September 2004 | Chemical abundances and mixing in stars in the Milky Way and its satellites,

Castiglione della Pescaia, Italy (poster).

July 2004 | Cool stars, stellar systems and the Sun, Hamburg, Germany (poster).

July 2003 | IAU 219: Stars as suns: activity, evolution and planets, Sydney, Australia (poster).

November 2002 | IAU 215: Stellar rotation, Cancun, Mexico (poster).

May 2000 | The interstellar medium in M31 and M33, Bad Honnef, Germany (talk).

April 2000 | The far-infrared and submillimeter spectral energy distributions of active and starburst galaxies, Groningen, The Netherlands (poster).

October 1998 | The Universe as seen by ISO, Paris, France.

May 1998 | 29th Annual Meeting of the Canadian Astronomical Society, Québec City, Canada (talk)

March 2008 | Seminar, Université de Montréal, Canada (talk).

October 1997 | Cyclical variability in stellar winds, Garching, Germany (poster).

Cooler 1307 Cyclical variationary in Section winds, Carelling, Certificity (poster).

September 1997 | Hypersonic radiative outflows out of thermal equilibrium, Mont St-odile, France (poster).

Wolf-Rayet stars in the framework of stellar evolution, Liège, Belgium (poster).

Computer skills

July 1996

- Exploitation systems: Unix, Linux, Windows.
- Expertise in the use of the IRAF software: reduction/analysis of spectroscopic (long-slit, echelle, multi-slit, multi-fiber) and imaging data (both optical and near-infrared).
- Development platform ECLIPSE.
- Experienced with the reduction of optical photometric data.
- Expertise with ATLAS9 (LTE atmosphere code).
- Expertise with MOOG (line analysis and spectrum synthesis) and DETAIL/SURFACE (NLTE line formation codes).
- Advanced scientific programming in JAVA, FORTRAN.
- Image processing techniques.
- Experienced with PowerPoint, OpenOffice.
- Basic knowledge of MIDAS and IDL.
- Expertise in the use of LATEX.