

DOB: 20th June 1981

NATIONALITY: British

LANGAUGES:

English

French



ADDRESS: **Department of Physics, Royal Military College of Canada, PO Box 17000, Station Forces, Kingston, Ontario CANADA, K7K 7B4**

EDUCATION **JAN 2007 - PRESENT** [Queen's University, Canada](#)
PhD in Astrophysics (Expected May 2012)
"High Resolution Magnetic Studies of Intermediate Mass Stars"
Advisors: Dr. Gregg Wade and Dr. David Hanes

SEPT 2004 - MAY 2007 [Queen's University, Canada](#)
MSc in Astrophysics
"Rotation, Chemical Abundances and Magnetic Fields of Ap Stars in Nearby Open Clusters"
Advisors: Dr. Gregg Wade and Dr. David Hanes

SEPT 2000 - JULY 2004 [University of Hertfordshire, UK](#)
BSc (Hons) in Astrophysics with a Year in Europe
Advisor: Dr. Philip Lucas

RESEARCH

RESEARCH INTERESTS **Stellar Spectropolarimetry, Stellar Magnetism, Magnetic Doppler Imaging and Instrumentation.**

RESEARCH EXPERIENCE **SEPT 2004 - PRESENT** **Research Assistant**
[Royal Military College and Queen's University, Kingston, Ontario](#)
Reduction and analysis of high resolution stellar spectropolarimetric data for magnetic field characterisation and for performing Magnetic Doppler Imaging.
Abundance analysis of Ap stars.
Advisors: Dr. Gregg Wade and Dr. David Hanes

SEPT 2007 & MAY 2010 **Visiting Researcher**
[University of Uppsala, Sweden](#)
Received hands-on experience with the computation techniques used in Magnetic Doppler Imaging (MDI).
Advisor: Dr. Oleg Kochukhov

SEPT 2006 - DEC 2006 **Research Assistant / Visiting Student**
[European Southern Observatory, Santiago, Chile](#)
Reduced and analyzed high resolution stellar spectropolarimetric data.
Advisor: Dr. Stefano Bangulo

SEPT 2002 - JUNE 2003 Research Assistant / Observing Assistant

[l'Observatoire Midi-Pyrénées, Tarbes, France](#)

Reduced and analyzed high resolution stellar spectropolarimetric data.

Obtained data using the 2 meter French national telescope (Telescope Bernard Lyot).

Observed on behalf of international collaborators.

Prepared observing schedules and collaborated with local supervisor on research projects.

Advisor: Dr. Michel Auriere

TEACHING & OUTREACH

EXPERIENCE JAN 2012 – APRIL 2012 Sessional Lecturer

[University of Ontario Institute of Technology, Canada](#)

Lecturer for an introductory astronomy course for non-science majors .

JAN 2011 – APRIL 2011 Physics Tutor

[Royal Military College, Canada](#)

Introductory physics tutor for students taking the Aboriginal Leadership Opportunity Year (ALLOY) course at RMC.

APRIL 2008 - APRIL 2009 Observatory Coordinator

[Queen's University, Canada](#)

Responsible for the operations of the observatory for public tours and student labs.

Provided technical support to the telescopes including routine maintenance, pointing calibrations on the portable telescope and testing and alignment of the main telescope optics. Organized tours and disseminated publicity to the press .

Gave telescope tours, including teaching members of the public about the night sky.

SEPT 2004 – JAN 2011 Teaching Assistant

[Queen's University, Canada](#)

Instructor, demonstrator and marker for physics 101 and astronomy 101 labs.

Oversaw first year tutorials for physics 101. Secondary lecturer for astronomy 101.

**PUBLIC
LECTURES**

**JAN 2012 - [Royal Astronomical Society of Canada, Kingston, Canada](#)
*Stellar Cartography***

**MAY 2009 - [Queen's University MiniU 2009](#)
*Where Queen's Astronomers go to Observe***

**NOV 2009 - [Queen's University, Astronomy History Day](#)
*The Life of William Herschel***

**FEB 2008 - [Armagh, Northern Ireland](#)
*Astronomers Trips***

**MAY 2006 - [Royal Astronomical Society of Canada, Kingston, Canada](#)
*The Pic du Midi Observatory***

**SUMMER 2003 - [North Essex Astronomical Society, UK](#)
*The Pic du Midi Observatory***

SUMMER 2003 - Loughton Astronomical Society, UK
The Pic du Midi Observatory

**POPULAR
PRESS**

Astronomy Now Magazine (UK)

Article: The Pic (du Midi) of the crop (Vol. 18, No. 2, 2004)

Book Review: The edge of infinity (Vol. 18, No. 7, 2004)

Book Review: Life in the solar system and beyond (Vol. 19, No. 3, 2005)

Astrarium (An Astronomy Radio Show on CFRC 101.9FM and Astronomy.FM)

Host and producer of a series of radio shows discussing astronomical topics. Aired from September 2008 until April 2009 on CFRC, now being rebroadcast on Astronomy.FM and itunes as a podcast.

OTHER

PROFESSIONAL DEVELOPMENT - Ithaca College, NY, US

NASA CAE (Centre for Astronomy Education) Workshop

Attended an intensive two day workshop aimed at teaching the techniques and theory behind the effective teaching of astronomy at a 101 level (to non-science majors) using the peer-instruction method.

ORGANIZATIONAL POSITIONS

CASCA RMC 2007

Member of LOC for the Canadian Astronomical Society Meeting hosted by RMC in 2007.

Canadian Space Summit Conference RMC 2009

Member of LOC, role included technical management of all presentations and panel discussions.

Kingston IYA (International Year of Astronomy) Organizing Committee

**REFEREED
PUBLICATIONS**

Bailey, J. D., Landstreet, J. D., Bagnulo, S., Fossati, L., Kochukhov, O., Paladini, C., **Silvester, J.**, Wade, G., 2011, A&A, 535, 25, *Magnetic Field and Atmospheric Chemical Abundances of the Magnetic Ap Star HD 318107*

Folsom, C. P., Kochukhov, O., Wade, G. A., **Silvester, J.**, Bagnulo, S., 2010, MNRAS, 407, 2383, *Magnetic field, chemical composition and line profile variability of the peculiar eclipsing binary star AR Aur*

Shavrina, A. V.; Glagolevskij, Yu. V., **Silvester, J.**, Chuntanov, G.A., Khalack, V.R., Pavlenko, Ya.V., 2010, MNRAS, 401, 1882, *Spots structure and stratification of helium and silicon in the atmosphere of He-weak star HD 21699*

Silvester, J., Neiner, C., Henrichs, H. F., Wade, G. A., Petit, V., Alecian, E., Huat, A.-L., Martayan, C., Power, J., Thizy, O., 2009, MNRAS, 398, 1505, *On the incidence of magnetic fields in slowly pulsating B, β Cephei and B-type emission-line stars*

Landstreet, J.D., Silaj, J., Andretta, V., Bagnulo, S., Berdyugina, S.V., Donati, J.-F., Fossati, L., Petit, P., **Silvester, J.**, Wade, G. A., 2008, A&A, 481, 2, 2008, *Searching for*

links between magnetic fields and stellar evolution. III. Measurement of magnetic fields in open cluster Ap stars with ESPaDOnS

Alecian, E., Catala, C., Wade, G. A., Donati, J.-F., Petit, P., Landstreet, J. D., Böhm, T., Bouret, J.-C., Bagnulo, S., Folsom, C., Grunhut, J., **Silvester, J.**, 2008, MNRAS, 385, 391, *Characterization of the magnetic field of the Herbig Be star HD200775*

Aurière, M., Wade, G.A., **Silvester, J.**, et al. 2007, A&A, 475, 1053, *Weak magnetic fields in Ap/Bp stars. Evidence for a dipole field lower limit and a tentative interpretation of the magnetic dichotomy*

Catala, C., Alecian, E., Donati, J.-F., Wade, G. A., Landstreet, J. D., Böhm, T., Bouret, J.-C., Bagnulo, S., Folsom, C., **Silvester, J.**, 2007, A&A, 462, 293, *The magnetic field of the pre-main sequence Herbig Ae star HD 190073*

Wade, G. A., Drouin, D., Bagnulo, S., Landstreet, J. D., Mason, E., **Silvester, J.**, Alecian, E., Böhm, T., Bouret, J.-C., Catala, C., Donati, J.-F., 2005, A&A, 442, 31, *Discovery of the pre-main sequence progenitors of the magnetic Ap/Bp stars?*

Ryabchikova, T., Wade, G. A., Aurière, M., Bagnulo, S., Donati, J.-F., Jeffers, S. V., Johnson, N., Landstreet, J. D., Lignières, F., Lueftinger, T., Marsden, S., Mouillet, D., Paletou, F., Petit, P., Reegen, P., **Silvester, J.**, Strasser, S., Toque, N., 2005, A&A, 429L, 55, *Rotational periods of four roAp stars*

TALKS

High Resolution Spectropolarimetry of Ap stars using ESPaDOnS and Narval
MAY 2011 - CASCA 2011, London, ON, Canada

On the incidence of magnetic fields in slowly pulsating B, β Cephei and B-type emission-line stars
AUG 2009 - IAU General Assembly, Rio de Janeiro, Brazil

Next Generation mapping of the magnetic fields and chemical spots of Ap stars
AUG 2009 - IAU General Assembly, Rio de Janeiro, Brazil

Cartography of the magnetic fields and chemical spots of Ap stars
JULY 2008 - Astropol 2008, La Malbaie, QC, Canada

Cartography of the magnetic fields and chemical spots of Ap stars
MAY 2008 - CASCA 2008, Victoria, BC, Canada

Magnetic Doppler Imaging of Ap stars
SEPT 2007 - CP/AP Workshop, Vienna, Austria

POSTERS

High Resolution Stokes IQUV monitoring of Ap Stars using ESPaDOnS
NOV 2010 - CFHT Users Meeting, Taipei, Taiwan

Magnetism in Pulsating B-Type Stars
MAY 2009 - CASCA 2009, Toronto, Canada

Magnetic observations of pulsating B and Be stars with ESPaDOnS at CFHT and Narval at TBL
NOV 2008 - IAU 259 Symposium on Cosmic Magnetism, Tenerife, Spain

Magnetic Doppler Imaging of Ap stars

MAY 2007 - CFHT Users Meeting, Marseille, France

An evolutionary study of magnetic Ap stars in 4 northern open clusters

JUNE 2005 - Element Stratification in Stars: 40 Years of Atomic Diffusion, Gers, France

SEMINARS

MAY 2010 - Uppsala University, Uppsala, Sweden

On the incidence of magnetic fields in slowly pulsating B, β Cephei and B-type emission-line stars

AUG 2009 - The Armagh Observatory, Northern Ireland

On the incidence of magnetic fields in slowly pulsating B, β Cephei and B-type emission-line stars

SEPT 2007 - Uppsala University, Uppsala, Sweden

Ap stars in open clusters and future high precision studies of field Ap stars

JAN 2007 - University of Hertfordshire, Hatfield, UK

Ap stars in open clusters and future high precision studies of field Ap stars

DEC 2006 - European Southern Observatory, Santiago, Chile

Ap stars in open clusters and future high precision studies of field Ap stars

OTHER

EXPERIENCE

MAY 2008 - MAY 2009 - CFRC (Queen's Campus and Community Radio Station)

Sound Technician / Broadcaster (Volunteer)

Provided technical support for recording and broadcasting from public locations.

For a series of live audio productions "the magic soundbox", acted as sound technician providing sound level monitoring during the live performances and providing assistance during equipment setup. Also host of both music and spoken word shows during this time.

SUMMER 2002, 2003 and 2004 - Wingham Wyatt Financial Services LTD, Essex, UK

Technical / Computer Support

Supported the computer system, client database, e-mail and office software.

Maintained the website. Updated client files and liaised with policy companies for client financial updates. Supported consultants and worked closely with software providers.

SCIENTIFIC

REFERENCES

Dr Gregg Wade

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Royal Military College of Canada,
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Kingston, Ontario K7K 7B4, Canada.
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E-mail: Gregg.Wade@rmc.ca

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