

Alexandros Gianninas, PhD

Visiting Assistant Professor of Physics
Department of Physics
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Citizenship: U.S. permanent resident, Canadian citizen

Academic Positions

- **Trinity College** Hartford, CT
Visiting Assistant Professor of Physics 2021 – present
- **Amherst College** Amherst, MA
Visiting Assistant Professor of Astronomy 2019 – 2021
- **American Public University** Charles Town, WV
Part-time Online Faculty 2017 – 2019
- **Quinnipiac University** Hamden, CT
Part-time Faculty 2018 – 2019
- **University of Hartford** Hartford, CT
Adjunct Professor 2017 - 2019
- **University of Connecticut** Storrs, CT
Adjunct Professor Summer 2017 - Session 2
- **University of Oklahoma** Norman, OK
Postdoctoral Research Fellow 2012 - 2017
– Advisor: Mukremin Kilic
- **Université de Montréal** Montréal, QC
Postdoctoral Research Associate 2011 - 2012
– Advisor: Pierre Bergeron

Education

- **Université de Montréal** Montréal, QC
Ph.D. Physics 2005 - 2011
– Advisor: Pierre Bergeron
– Thesis: Spectroscopic Survey and Analysis of Bright, Hydrogen-Rich White Dwarfs
- **Université de Montréal** Montréal, QC
M.Sc. Physics 2003 - 2005
– Advisor: Pierre Bergeron
– Thesis: Study of the Instability Strip of ZZ Ceti Type White Dwarf Stars
– Dean's list
- **McGill University** Montréal, QC
B.Sc. Honors Physics 2000 - 2003

Awards, Grants & Honours

Hubble Space Telescope Grant, GO Program 13319 (PI, \$85,000)	2014
Doctoral Research Scholarship (\$10,000 CAD)	2009 – 2010
NSERC Canada Graduate Scholarship (CGS D) (\$35,000 CAD/yr)	2006 – 2009
FQRNT Doctoral Scholarship (\$20,000 CAD/yr, declined)	2006 – 2009
Governor General of Canada's Academic Gold Medal	2006
Dean's List	2006
J. Armand Bombardier Scholarship (\$10,000)	2006
Scholarship of the National Bank of Greece (\$5000)	2006
Doctoral Scholarship of Excellence (\$10,000)	2005 – 2006
Hubert Reeves Scholarship of Excellence (\$2500)	2005
Scholarship of Excellence (\$2000)	2004 & 2005
NSERC Undergraduate Student Research Award (\$4000)	2003

Teaching Experience

- **Amherst College** Amherst, MA
Visiting Assistant Professor of Astronomy 2019 – Present

 - Managing Astronomy Comprehensive Examination
 - Observing the Sky (ASTR110)
 - Exploring the Cosmos (ASTR111)
 - Advanced Astrophysics (ASTR352)
 - Independent Study (ASTR490)
 - * Bayesian Statistics and Machine Learning in Astronomy

- **American Public University** Charles Town, WV
Part-time Online Faculty 2017 – 2019

 - Habitable Worlds: Are We Alone? (SCIN121)
 - Senior Seminar in Space Studies (SPST499)
 - Chronology of Space (SPST503)
 - Astrophysical Studies (SPST631)
 - Astronomical Instrumentation (SPST633)
 - Comets, Asteroids, and Meteorites (SPST634)

- **Quinnipiac University** Hamden, CT
Part-time Faculty 2018 – 2019

 - Elements of Physics (PHY101)
 - General Physics I (PHY110) & Lab (PHY110L)
 - General Physics II Lab (PHY111L)
 - Earth Sciences (SC1102)

- **University of Hartford** Hartford, CT
Adjunct Professor 2017 – 2019

 - Algebra-Based Physics I with Lab (PHY120)
 - Introduction to Astronomy with Lab (PHY130)
 - * Compiled first lab manual incorporating new labs
 - Descriptive Geology with Lab (PH135)

- **University of Connecticut** Storrs, CT
Adjunct Professor *Summer 2017 – Session 2*
 – Introduction to Astronomy with Lab (PHY1025)
- **University of Oklahoma** Norman, OK
Substitute Instructor *Fall 2012 – Spring 2014*
 – Life in the Universe (AST1523)
 – Stars (AST3103)
 – Stellar Astrophysics (G4303)
- **Université de Montréal** Montréal, QC
Teaching Assistant *2004 – 2009*
 – Physical Optics (PHY1982)

Professional Collaborations

- **LSST Science Collaboration**
Member of Stars, Milky Way and Local Volume Working Group *2013 - present*
- **PanSTARRS Collaboration**
External Scientist *2013 - present*

External Telescope Proposals

Principal Investigator

- **NOAO Prop. ID 2016B-0160, KPNO 4m** 5 nights
The ELM Survey: Finding the Shortest Period Binary White Dwarfs
- **Gemini Prop. ID 2016A-0075, Gemini North** 4.1 hrs
Searching for Pulsations in Mixed Atmosphere Extremely Low-Mass White Dwarfs
- **Spitzer Space Telescope Cycle 10 GO Program 10107** 6.8 hrs
The Origin of Metals in Extremely Low Mass White Dwarfs
- **Hubble Space Telescope Cycle 21 GO Program 13319** 17 orbits
COS Spectroscopy of Pulsating, Metal-Rich, Extremely Low Mass White Dwarfs

Co-Investigator

- **NOAO Prop. 2017A-0076, CTIO 4m/SOAR** 5 nights
Double Degenerates in the SDSS + BOSS
- **Hubble Space Telescope Cycle 24 GO Program** 4 orbits
Connecting Variability and Metals in White Dwarfs
- **Gemini Prop. ID 2016B-0006, Gemini North** 4 hrs
A Candidate Pulsating White Dwarf Companion to PSR J2234+0611
- **Gemini Prop. ID 2016B-0008, Gemini North & South** 9.5 hrs
The Shortest Period Binary White Dwarfs in SDSS DR10
- **NOAO Prop. ID 2016A-0057, Gemini North & South** 25.65 hrs
The Shortest Period Binary White Dwarfs in SDSS DR10

- **NRAO Prop. ID 16A-324, Green Bank Telescope** 6 hrs
The Pulsar Coincident with the Low-Mass WD J0802–0955
- **Chandra X-Ray Observatory Cycle 17 GO Program 17400453** 22 ks
The Massive Companions to Low-Mass White Dwarfs
- **Gemini Prop. DT-2015A-025, Gemini North** 3.3 hrs
Confirmation of a Type Ia supernova progenitor
- **NOAO Prop. ID 2015B-0122, KPNO 4m** 5 nights
The ELM Survey: Finding the Shortest Period Binary White Dwarfs
- **Gemini Prop. ID 2015A-0019, Gemini South** 0.4 nights
The First Pulsar + Pulsating White Dwarf System
- **Gemini Prop. ID 2015A-0058, Gemini North** 1.2 nights
A Search for Massive White Dwarf Pulsators
- **NOAO Prop. ID 2015A-0082, KPNO 4m** 4 nights
The ELM Survey: Finding the Shortest Period Binary White Dwarfs
- **NOAO Prop. ID 2014B-0119, KPNO 4m** 5 nights
The ELM Survey: Finding the Shortest Period Binary White Dwarfs
- **Gemini Prop. ID 2014A-0006, Gemini North** 0.4 nights
A Search for Pulsating White Dwarf Companions to Millisecond Pulsars
- **NOAO Prop. ID 2014A-0189, KPNO 4m** 4 nights
The ELM Survey: Finding the Shortest Period Binary White Dwarfs
- **Gemini Prop. ID 2013B-0004, Gemini South** 0.4 nights
A Search for Pulsating White Dwarf Companions to Millisecond Pulsars
- **NOAO Prop. ID 2013B-0130, KPNO 4m** 4 nights
The ELM Survey: Finding the Shortest Period Binary White Dwarfs
- **NOAO Prop. ID 2013A-0084, Keck I** 0.5 nights
Gravitational Waves from the 12 min. Orbital Period Binary White Dwarf J0651+2844

Student Supervision & Mentorship

- **Julissa Sarmiento (REU Student)** University of Oklahoma
Parallaxes for White Dwarfs from the URAT Catalog Summer 2016
Currently: Physics Major, Wellesley College
- **Kyra Dame (Graduate Student)** University of Oklahoma
Photometric Analysis of Halo White Dwarf Candidates 2014 – 2018
- **Paul Canton (PhD Candidate)** University of Oklahoma
The ELM Survey, Initial-Final Mass Relation from Open Clusters 2012 – 2018
- **Brandon Curd (Physics Major)** University of Oklahoma
Searching for Massive Pulsating White Dwarfs 2013 – 2016
Currently: Graduate Student, Harvard University
- **Claudia Belardi (Graduate Student)** University of Oklahoma
Searching for Transiting Planets Around White Dwarfs 2014 – 2015
Currently: Graduate Student, University of Leicester

- **Jeff Andrews (PhD Thesis)** Columbia University
The Initial-Final Mass Relation from Wide Double White Dwarfs
2013 – 2015
Currently: Postdoctoral Researcher, University of Crete
- **Sara Barber (PhD Thesis)** University of Oklahoma
Debris Disks and Planetary Remnants Around White Dwarfs
2012 – 2015
Currently: AIP Fellow, House Committee on Science, Space and Tech.
- **Charlotte Wood (REU Student)** University of Oklahoma
Spitzer Photometry of Extremely Low-Mass White Dwarfs
Summer 2015
Currently: Physics Major, Hofstra University
- **Christina Gilligan (REU Student)** University of Oklahoma
Infrared Photometry of a Cool, Magnetic and Metal-rich White Dwarf
Summer 2014
Currently: Graduate Student, Dartmouth College
- **Benjamin Strickland (Physics Major)** University of Oklahoma
Limb-Darkening Coefficients for Eclipsing White Dwarfs
2012 – 2013
Currently: Graduate Student, University of Oregon

Memberships and Professional Service

- **American Astronomical Society**
Full Member 2014 – present
- **Canadian Astronomical Society/Société Canadienne d’Astronomie**
Student Member 2005 – 2011
- **Proposal Review**
 - Liverpool Telescope TAC* November 2020
 - Gemini Observatory (Canadian TAC)* October 2020
 - NSF Astrophysics & Astronomy Research Grant Program* March 2018
 - NASA Astrophysics Data Analysis Program* August 2016
 - Gemini Observatory Fast Turnaround Program* June 2016
- **Referee Service**
 - Astrophysical Journal (2 papers)* 2016 – present
 - Monthly Notices of the Royal Astronomical Society (2 papers)* 2016 – present
 - Astronomy & Astrophysics (5 papers)* 2013 – present
 - Publications of the Astronomical Society of the Pacific (1 paper)* 2008

Publications (H-index = 29)

First Author

11. [Discovery of Three Pulsating, Mixed-Atmosphere, Extremely Low-Mass White Dwarf Precursors](#)
A. Gianninas, B. Curd, G. Fontaine, W. R. Brown, & M. Kilic 2016, *Astrophysical Journal Letters*, 822, L27
10. [The ELM Survey. VI. Eleven New Double Degenerates](#)
A. Gianninas, M. Kilic, W. R. Brown, P. Canton, & S. J. Kenyon 2015, *Astrophysical Journal*, 812, 167

9. *Ultracool White Dwarfs and the Age of the Galactic Disc*
A. Gianninas, B. Curd, J. R. Thorstensen, M. Kilic, P. Bergeron, J. J. Andrews, P. Canton, & M. A. Agüeros 2015, *Monthly Notices of the Royal Astronomical Society*, 449, 3966
8. *Precise Atmospheric Parameters for the Shortest-period Binary White Dwarfs: Gravitational Waves, Metals, and Pulsations*
A. Gianninas, P. Dufour, M. Kilic, W. R. Brown, P. Bergeron & J. J. Hermes, 2014, *Astrophysical Journal*, 794, 35
7. *SDSS J074511.56+194926.5: Discovery of a Metal-Rich and Tidally Distorted Extremely Low-Mass White Dwarf*
A. Gianninas, J. J. Hermes, W. R. Brown, P. Dufour, M. Kilic, S. J. Kenyon & S. T. Harrold, 2014, *Astrophysical Journal*, 781, 104
6. *Limb-Darkening Coefficients for Eclipsing White Dwarfs*
A. Gianninas, B. D. Strickland, M. Kilic, & P. Bergeron, 2013, *Astrophysical Journal*, 766, 3
5. *A Spectroscopic Survey and Analysis of Bright, Hydrogen-Rich White Dwarfs*
A. Gianninas, P. Bergeron, & M. T. Ruiz, 2011, *Astrophysical Journal*, 743, 138
4. *Spectroscopic Analysis of Hot, Hydrogen-Rich White Dwarfs: The Presence of Metals and the Balmer-Line Problem*
A. Gianninas, P. Bergeron, J. Dupuis, & M. T. Ruiz, 2010, *Astrophysical Journal*, 720, 581
3. *Mapping the ZZ Ceti Instability Strip: Discovery of Six New Pulsators*
A. Gianninas, P. Bergeron, & G. Fontaine, 2006, *Astronomical Journal*, 132, 831
2. *Toward an Empirical Determination of the ZZ Ceti Instability Strip*
A. Gianninas, P. Bergeron, & G. Fontaine, 2005, *Astrophysical Journal*, 631, 1100
1. *Discovery of a Cool, Massive, and Metal-Rich DAZ White Dwarf*
A. Gianninas, P. Bergeron, & P. Dufour, 2004, *Astrophysical Journal Letters*, 617, L57

Second Author

8. *Four New Massive Pulsating White Dwarfs Including An Ultramassive DAV*
B. Curd, A. Gianninas, K. J. Bell, M. Kilic, A. D. Romero, C. Allende Prieto, D. E. Winget, & K. I. Winget, 2017, *Monthly Notices of the Royal Astronomical Society*, 468, 239
7. *Pruning the ELM Survey: Characterizing Candidate Low-Mass White Dwarfs Through Photometric Variability*
K. J. Bell, A. Gianninas, J. J. Hermes, D. E. Winget, M. Kilic, M. H. Montgomery, B. G. Castanheira, Z. Vanderbosch, K. I. Winget & W. R. Brown, 2017, *Astrophysical Journal*, 835, 180
6. *New Halo White Dwarf Candidates in the Sloan Digital Sky Survey*
K. Dame, A. Gianninas, M. Kilic, J. A. Munn, W. R. Brown, K. A. Williams, T. von Hippel, & H. C. Harris, 2016, *Monthly Notices of the Royal Astronomical Society*, 463, 2453
5. *The ELM Survey. VII. Orbital Properties of Low-Mass White Dwarf Binaries*
W. R. Brown, A. Gianninas, M. Kilic, S. J. Kenyon, & C. Allende Prieto, 2016, *Astrophysical Journal*, 818, 155
4. *A Dark Spot on a Massive White Dwarf*
M. Kilic, A. Gianninas, K. J. Bell, B. Curd, W. R. Brown, J. J. Hermes, P. Dufour, J. P. Wisniewski, D. E. Winget, & K. I. Winget, 2015, *Astrophysical Journal Letters*, 814, L31

3. *3D Model Atmospheres for Extremely Low-Mass White Dwarfs*
P.-E. Tremblay, **A. Gianninas**, M. Kilic, H.-G. Ludwig, M. Steffen, B. Freytag, & J. J. Hermes 2015, *Astrophysical Journal*, 809, 148
2. *The Runaway Binary LP 400-22 is Leaving the Galaxy*
M. Kilic, **A. Gianninas**, W. R. Brown, H. C. Harris, C. C. Dahn, M. A. Agüeros, C. O. Heinke, & S. J. Kenyon, S. J. Panei, F. Camilo, 2013, *Monthly Notices of the Royal Astronomical Society*, 434, 3582
1. *Moving Objects in the Hubble Ultra Deep Field*
M. Kilic, **A. Gianninas**, & T. von Hippel, 2013, *Astrophysical Journal*, 774, 88

Nth Author

46. *The ELM Survey South I. An Efficient & Targeted Search for Double White Dwarfs*
A. Kosakowski, M. Kilic, W. R. Brown, & **A. Gianninas** 2020, *The Astrophysical Journal*, 894, 1
45. *The ELM Survey VIII. The Final Sample of 98 Double White Dwarf Binaries*
W. R. Brown, M. Kilic, A. Kosakowski, J. J. Andrews, C. O. Heinke, M. A. Agüeros, F. Camilo, **A. Gianninas**, J.J. Hermes, & S. J. Kenyon 2020, *The Astrophysical Journal*, 889, 49
44. *The DECam Minute Cadence Survey II: 49 Variables in the First Field*
K. Dame, C. Belardi, M. Kilic, A. Rest, **A. Gianninas**, S. Barber & W. R. Brown 2019, *Monthly Notices of the Royal Astronomical Society*, 490, 1066
43. *GALEX Absolute Calibration and Extinction Coefficients Based on White Dwarfs*
R. E. Wall, M. Kilic, P. Bergeron, B. Rolland, C. Genest-Beaulieu, & **A. Gianninas** 2019, *Monthly Notices of the Royal Astronomical Society*, 489, 5046
42. *Ensemble Properties of the White Dwarf Population of the Old, Solar Metallicity Open Star Cluster Messier 67*
K. A. Williams, P. A. Canton, A. Bellini, M. Bolte, K. H. R. Rubin, **A. Gianninas**, & M. Kilic 2018, *The Astrophysical Journal*, 867, 62
41. *A Refined Search for Pulsations in White Dwarf Companions to Millisecond Pulsars*
M. Kilic, J. J. Hermes, A. H. Córscico, A. Kosakowski, W. R. Brown, J. Antoniadis, L. M. Calcaferro, **A. Gianninas**, L. G. Althaus & M. J. Green 2018, *Monthly Notices of the Royal Astronomical Society*, 479, 1267
40. *A Serendipitous Pulsar Discovery in a Search for a Companion to a Low-mass White Dwarf*
J. J. Andrews, M. A. Agüeros, F. Camilo, M. Kilic, **A. Gianninas**, W. R. Brown, & C. Heinke 2018, *Research Notes of the American Astronomical Society*, 2, 60
39. *Probing the Structure of Kepler ZZ Ceti Stars with Full Evolutionary Models-Based Asteroseismology*
A. D. Romero, A. H. Córscico, B. G. Castanheira, F. C. De Gerónimo, S. O. Kepler, D. Koester, A. Kawka, L. G. Althaus, J. J. Hermes, C. Bonato & **A. Gianninas** 2017, *The Astrophysical Journal*, 851, 60
38. *A Gemini Snapshot Survey for Double Degenerates*
M. Kilic, W. R. Brown, **A. Gianninas**, B. Curd, K. J. Bell, & C. Allende Prieto, 2017, *Monthly Notices of the Royal Astronomical Society*, 471, 4218
37. *Discovery of a Detached, Eclipsing 40 Minute Period Double White Dwarf Binary and a Friend: Implications for He+CO White Dwarf Mergers*
W. R. Brown, M. Kilic, A. Kosakowski, & **A. Gianninas**, 2017, *Astrophysical Journal*, 847, 10

36. [Project 1640 Observations of the White Dwarf HD 114174 B](#)
E. Bacchus, I. R. Parry, R. Oppenheimer, J. Aguilar, C. Beichman, D. Brenner, R. Burruss, E. Cady, S. Luszcz-Cook, J. Crepp, R. Dekany, R. Fergus, **A. Gianninas**, L. Hillenbrand, S. Hinkley, M. Kilic, D. King, T. G. Lockhart, C. T. Matthews, R. Nilsson, T. Pearce, L. Pueyo, E. L. Rice, L. C. Roberts, Jr., A. Sivaramakrishnan, R. Soummer, G. Vasisht, A. Veicht, C. Zhai & N. T. Zimmerman 2017, *Monthly Notices of the Royal Astronomical Society*, 469, 4796
35. [The Physical Nature of Subdwarf A Stars: White Dwarf Impostors](#)
W. R. Brown, M. Kilic, & **A. Gianninas** 2017, *Astrophysical Journal*, 839, 23
34. [A Deep Proper Motion Catalog Within the Sloan Digital Sky Survey Footprint. II. The White Dwarf Luminosity Function](#)
J. A. Munn, H. C. Harris, T. von Hippel, M. Kilic, J. W. Liebert, K. A. Williams, S. DeGennaro, E. Jeffery, K. Dame, **A. Gianninas**, & W. R. Brown 2017, *Astronomical Journal*, 153, 10
33. [Astero seismic Test of Rotational Mixing in Low-Mass White Dwarfs](#)
A. G. Istrate, G. Fontaine, **A. Gianninas**, L. Grassitelli, P. Marchant, T. M. Tauris, & N. Langer 2016, *Astronomy & Astrophysics Letters*, 595, L12
32. [Outbursts in Two New Cool Pulsating DA White Dwarfs](#)
K. J. Bell, J. J. Hermes, M. H. Montgomery, N. P. Gentile Fusillo, R. Raddi, B. T. Gänsicke, D. E. Winget, E. Dennihey, **A. Gianninas**, P. Chote, & K. I. Winget 2016, *Astrophysical Journal*, 829, 82
31. [The DECam Minute Cadence Survey - I](#)
C. Belardi, M. Kilic, J. A. Munn, **A. Gianninas**, S. D. Barber, A. Dey, B. Jannuzi, & P. B. Stetson 2016, *Monthly Notices of the Royal Astronomical Society*, 462, 2506
30. [Today a Duo, But Once a Trio? The Double White Dwarf HS 2220+2146 May Be a Post Blue-Straggler Binary](#)
J. J. Andrews, M. Agüeros, W. R. Brown, N. M. Gosnell, **A. Gianninas**, M. Kilic, & D. Koester 2016, *Astrophysical Journal*, 828, 38
29. [Massive Double White Dwarfs and the AM CVn Birthrate](#)
M. Kilic, W. R. Brown, C. O. Heinke, **A. Gianninas**, P. Benni, M. A. Agüeros 2016, *Monthly Notices of the Royal Astronomical Society*, 460, 4176
28. [Most Double Degenerate Low-Mass White Dwarf Binaries Merge](#)
W. R. Brown, M. Kilic, S. J. Kenyon, & **A. Gianninas** 2016, *Astrophysical Journal*, 824, 46
27. [Remnant Planetary Systems Around Bright White Dwarfs](#)
S. D. Barber, C. Belardi, M. Kilic, & **A. Gianninas** 2016 *Monthly Notices of the Royal Astronomical Society*, 459, 1415
26. [SDSS J1152+0248: An Eclipsing Double White Dwarf from the Kepler K2 Campaign](#)
N. Hallakoun, D. Maoz, M. Kilic, T. Mazeh, **A. Gianninas**, E. Agol, K. J. Bell, S. Bloemen, W. R. Brown, J. Debes, S. Faigler, I. Kull, T. Kupfer, A. Loeb, B. M. Morris, & F. Mullally 2016, *Monthly Notices of the Royal Astronomical Society*, 458, 845
25. [Constraints on the Initial-Final Mass Relation from Wide Double White Dwarfs](#)
J. J. Andrews, M. A. Agüeros, **A. Gianninas**, M. Kilic, S. Dhital, & S. F. Anderson, 2015, *Astrophysical Journal*, 815, 63
24. [Time-Series Spectroscopy of Two Candidate Double Degenerates in the Open Cluster NGC 6633](#)
K. A. Williams, D. Serna-Grey, S. Chakraborty, **A. Gianninas** & P. Canton, 2015, *Astronomical Journal*, 150, 194

23. *Insights into Internal Effects of Common-Envelope Evolution using the Extended Kepler Mission*
J. J. Hermes, B. T. Gänsicke, A. Bischoff-Kim, S. D. Kawaler, J. T. Fuchs, B. H. Dunlap,
J. C. Clemens, M. H. Montgomery, P. Chote, T. Barclay, T. R. Marsh, **A. Gianninas**, D. Koester,
D. E. Winget, D. J. Armstrong, A. Rebassa-Mansergas, & M. R. Schreiber 2015, *Monthly Notices of
the Royal Astronomical Society*, 451, 1701
22. *PSR J1738+0333: The First Millisecond Pulsar + Pulsating White Dwarf Binary*
M. Kilic, J. J. Hermes, **A. Gianninas**, & W. R. Brown, 2014, *Monthly Notices of the Royal
Astronomical Society: Letters*, 446, L26
21. *Heavy Metals in a Light White Dwarf: UV Abundances of the Metal-Rich, Extremely Low-Mass
GALEX J1717+6757*
J. J. Hermes, B. T. Gänsicke, D. Koester, M. C. P. Bours, D. M. Townsley, J. Farihi, S. Littlefair,
T. R. Marsh, V. S. Dhillon, **A. Gianninas**, E. Breedt, & R. Raddi, 2014, *Monthly Notices of the
Royal Astronomical Society*, 444, 1674
20. *Radius Constraints and Relativistic Effects from High-Speed Photometry of 20 Merging Low-Mass
White Dwarf Binaries*
J. J. Hermes, W. R. Brown, M. Kilic, **A. Gianninas**, P. Chote, D. J. Sullivan, D. E. Winget,
K. J. Bell, R. E. Falcon, K. I. Winget, P. A. Mason, S. T. Harrold, & M. H. Montgomery, 2014,
Astrophysical Journal, 792, 39
19. *A New Gravitational Wave Verification Source*
M. Kilic, Warren R. Brown, **A. Gianninas**, J. J. Hermes, C. Allende Prieto, & S. J. Kenyon,
Monthly Notices of the Royal Astronomical Society: Letters, 444, L1
18. *Flux Calibration of Medium-Resolution Spectra from 300 nm to 2 500 nm: Model Reference Spectra
and Telluric Correction*
S. Moehler, A. Modigliani, Freudling, W., N. Giammichele, **A. Gianninas**, A. Gonneau,
W. Kausch, A. Lançon, S. Noll, T. Rauch, & J. Vinther, 2014, *Astronomy & Astrophysics*, 568, A9
17. *Dusty White Dwarfs in the WISE All Sky Survey \cap SDSS*
S. D. Barber, M. Kilic, W. R. Brown, & **A. Gianninas**, 2014, *Astrophysical Journal*, 786, 77
16. *Mid-Infrared High-Contrast Imaging of HD 114174 B: An Apparent Age Discrepancy in a
“Sirius-like” Binary System*
C. T. Matthews, J. R. Crepp, A. Skemer, P. Hinz, **A. Gianninas**, M. Kilic, M. Skrutskie,
V. P. Bailey, D. Defrere, J. Leisenberg, S. Esposito, & A. Puglisi, 2014, *Astrophysical Journal
Letters*, 783, L25
15. *Precise Parameters for Both White Dwarfs in the Eclipsing Binary CSS 41177*
M. C. P. Bours, T. R. Marsh, S. G. Parsons, C. M. Copperwheat, V. S. Dhillon, S. P. Littlefair,
B. T. Gänsicke, **A. Gianninas**, & P.-E. Tremblay, 2014, *Monthly Notices of the Royal
Astronomical Society*, 438, 3399
14. *Found: The Progenitors of AM CVn and Supernovae .Ia*
M. Kilic, J. J. Hermes, **A. Gianninas**, C. O. Heinke, W. R. Brown, & M. A. Agüeros, 2014,
Monthly Notices of the Royal Astronomical Society: Letters, 438, L26
13. *A New Class of Pulsating White Dwarf of Extremely Low-Mass: the Fourth and Fifth Members*
J. J. Hermes, M. H. Montgomery, **A. Gianninas**, D. E. Winget, W. R. Brown, S. T. Harrold,
K. J. Bell, S. J. Kenyon & M. Kilic, 2013, *Monthly Notices of the Royal Astronomical Society*, 436,
3573

12. *The TRENDS High-Contrast Imaging Survey. III. A Faint White Dwarf Companion Orbiting HD 114174*
J. R. Crepp, J. A. Johnson, A. W. Howard, G. W. Marcy, **A. Gianninas**, M. Kilic, D. A. Fischer, J. T. Wright, & H. Issacson, 2013, *Astrophysical Journal*, 774, 1
11. *Accretion and Activity on the Post-Common-Envelope Binary RR Caeli*
T. Ribeiro, R. Baptista, S. Kafka, P. Dufour, **A. Gianninas**, & G. Fontaine, 2013, *Astronomy & Astrophysics*, 556, A34
10. *Discovery of an Ultramassive Pulsating White Dwarf*
J. J. Hermes, S. O. Kepler, B. Castanheira, **A. Gianninas**, D. E. Winget, M. H. Montgomery, W. R. Brown, & S. T. Harrold, 2013, *Astrophysical Journal Letters*, 771, L2
9. *The ELM Survey. V. Merging Massive White Dwarf and Neutron Star Binaries*
W. R. Brown, M. Kilic, C. Allende Prieto, **A. Gianninas**, & S. J. Kenyon, 2013, *Astrophysical Journal*, 769, 66
8. *Hubble Space Telescope Imaging of the Binary Nucleus of the Planetary Nebula EGB 6*
J. Liebert, H. E. Bond, P. Dufour, R. Ciardullo, M. G. Meakes, A. Renzini & **A. Gianninas**, 2013, *Astrophysical Journal*, 769, 32
7. *Discovery of Pulsations, Including Possible Pressure Modes, in Two Extremely Low Mass, He-core White Dwarfs*
J. J. Hermes, M. H. Montgomery, D. E. Winget, W. R. Brown, **A. Gianninas**, M. Kilic, S. J. Kenyon, K. J. Bell, S. T. Harrold, 2013, *Astrophysical Journal*, 765, 102
6. *Rapid Orbital Decay in the 12.75-minute Binary White Dwarf J0651+2844*
J. J. Hermes, M. Kilic, W. R. Brown, D. E. Winget, C. Allende Prieto, **A. Gianninas**, A. S. Mukadam, A. Cabrera-Lavers, & S. J. Kenyon, 2012, *Astrophysical Journal Letters*, 757, L21
5. *A Comprehensive Spectroscopic Analysis of DB White Dwarfs*
P. Bergeron, F. Wesemael, Pierre Dufour, A. Beauchamp, C. Hunter, R. A. Saffer, **A. Gianninas**, M. T. Ruiz, M.-M. Limoges, Patrick Dufour, G. Fontaine, & J. Liebert, 2011, *Astrophysical Journal*, 737, 28
4. *An Improved Spectroscopic Analysis of DA White Dwarfs from the Sloan Digital Sky Survey Data Release 4*
P.-E. Tremblay, P. Bergeron, & **A. Gianninas**, 2011, *Astrophysical Journal*, 730, 128
3. *Discovery of a T Dwarf + White Dwarf Binary*
A. C. Day-Jones, D. J. Pinfield, M. T. Ruiz, H. Beaumont, B. Burningham, J. Gallardo, **A. Gianninas**, P. Bergeron, R. Napitwotzki, J. S. Jenkins, Z. S. Zhang, D. N. Murray, S. Catalán, & J. Gomes, 2011, *Monthly Notices of the Royal Astronomical Society*, 410, 705
2. *New Insights into the Problem of the Surface Gravity Distribution of Cool White Dwarfs*
P.-E. Tremblay, P. Bergeron, J. Kalirai, & **A. Gianninas**, 2010, *Astrophysical Journal*, 712, 135
1. *Precise Estimates of the Synthetic Spectral Distances to DA White Dwarfs*
J. B. Holberg, P. Bergeron, & **A. Gianninas**, 2008, *Astronomical Journal*, 135, 1239

Conference Proceedings

15. *Magnetic Atmosphere Models for White Dwarfs with Heavy Metals*
P. Dufour, S. Jordan, S. Blouin, F. Tardif, J. Groulx, M. Kilic, **A. Gianninas**, S. D. Barber, & C. Gilligan, *Astronomical Society of the Pacific: Conference Series*, 493, 37

14. *Amplitude Variability as Evidence of Crystallization in GD 518 and Other Massive Pulsating White Dwarfs*
J. J. Hermes, S. O. Kepler, M. H. Montgomery, **A. Gianninas**, B. G. Castanheira, & D. E. Winget, *Astronomical Society of the Pacific: Conference Series*, 493, 59
13. *High-speed Photometric Observations of ZZ Ceti White Dwarf Candidates*
E. M. Green, M.-M. Limoges, **A. Gianninas**, P. Bergeron, G. Fontaine, P. Dufour, C. J. O'Malley, B. Guvenen, L. I. Biddle, K. Pearson, T. W. Deyoe, C. W. Bullivant, J. J. Hermes, V. Van Grootel, & M. Grosjean, *Astronomical Society of the Pacific: Conference Series*, 493, 237
12. *Constraining the Initial-Final Mass Relation with Wide Double Wide Dwarfs*
J. J. Andrews, M. A. Agüeros, **A. Gianninas**, M. Kilic, S. Dhital, & S. Anderson, 2015, *Astronomical Society of the Pacific: Conference Series*, 493, 301
11. *A Detailed Study of CSS 41177: an Eclipsing Double White Dwarf Binary*
M. C. P. Bours, T. R. Marsh, S. G. Parsons, C. M. Copperwheat, V. S. Dhillon, S. P. Littlefair, B. T. Gänsicke, **A. Gianninas**, & P.-E. Tremblay, 2015, *Astronomical Society of the Pacific: Conference Series*, 493, 313
10. *The Search for the Shortest Period Binary White Dwarfs: The Latest Results from the ELM Survey*
A. Gianninas, M. Kilic, W. R. Brown, P. Canton, J. J. Hermes, K. J. Bell, and S. T. Harrold, 2015, *Astronomical Society of the Pacific: Conference Series*, 493, 481
9. *Gravitational Wave Verification Sources*
M. Kilic, W. R. Brown, J. J. Hermes, & **A. Gianninas**, 2015, *Astrophysics and Space Science Proceedings*, 40, 167
8. *Flux Calibration of Medium-Resolution Spectra from 300 nm to 2500 nm*
S. Moehler, A. Modigliani, W. Freudling, N. Giammichele, **A. Gianninas**, A. Gonneau, W. Kausch, A. Lançon, S. Noll, T. Rauch, & J. Vinther, 2014, *Proceedings of SPIE*, 9149, 91490L
7. *A Preliminary Spectroscopic Analysis of Hyades White Dwarfs*
A. Gianninas, M. Kilic, & W. R. Brown, 2013, *Astronomical Society of the Pacific: Conference Series*, 469, 101
6. *Discovery of the First White Dwarf + T Dwarf Binary System and the Use of White Dwarfs as Age Calibrators*
A. C. Day-Jones, D. J. Pinfield, M. T. Ruiz, H. Beaumont, J. Gallardo, **A. Gianninas**, P. Bergeron, R. Napiwotzki, J. S. Jenkins, B. Burningham, Z. H. Zhang, H. R. A. Jones, D. Murray, S. Catalán, & J. Gomes, 2010, *American Institute of Physics: Conference Series*, 1273, 366
5. *A Comprehensive Spectroscopic Analysis of DB White Dwarfs*
P. Bergeron, F. Wesemael, Pierre Dufour, A. Beauchamp, C. Hunter, G. Fontaine, P. Dufour, **A. Gianninas**, S. Desharnais, R. A. Saffer, J. Liebert, & M. T. Ruiz, 2010, *American Institute of Physics: Conference Series*, 1273, 7
4. *Spectroscopic Analysis of DA White Dwarfs from the McCook & Sion Catalog*
A. Gianninas, P. Bergeron, & M. T. Ruiz, 2009, *Journal of Physics: Conference Series*, 171, 012021
3. *The Mass Distribution of White Dwarfs: An Unwavering Obsession*
P. Bergeron, **A. Gianninas**, & S. Boudreault, 2007, *Astronomical Society of the Pacific: Conference Series*, 372, 29

2. [A Progress Report on the Empirical Determination of the ZZ Ceti Instability Strip](#)
A. Gianninas, P. Bergeron, & G. Fontaine, 2007, *Astronomical Society of the Pacific: Conference Series*, 372, 577
1. [Analysis of DA White Dwarfs from the McCook & Sion Catalog](#)
A. Gianninas, P. Bergeron, & P. Dufour, 2005, *Astronomical Society of the Pacific: Conference Series*, 334, 139

White Papers

1. [Habitable Planets Around White Dwarfs: An Alternate Mission for the Kepler Spacecraft](#)
M. Kilic, E. Agol, A. Loeb, D. Maoz, J. A. Munn, A. Gianninas, P. Canton, & S. D. Barber, Kepler White Paper, arXiv:1309.0009

Colloquia and Seminars

- **Searching for Galactic Gravitational Wave Sources**
NASA Goddard Space Flight Center (Baltimore, MD, USA) *Jan. 10, 2017*
- **The ELM Survey: Searching for Galactic Gravitational Wave Sources**
American Museum of Natural History (New York, NY, USA) *Nov. 15, 2016*
- **The Importance of Pulsating Extremely Low-Mass White Dwarfs**
Université de Montréal (Montréal, QC, Canada) *Nov. 10, 2016*
- **The Importance of Pulsating Extremely Low-Mass White Dwarfs**
University of Connecticut (Storrs, CT, USA) *Sept. 12, 2016*
- **The ELM Survey: The Search for the Most Extreme Binary White Dwarfs**
University of Connecticut (Storrs, CT, USA) *Nov. 20, 2015*
- **The ELM Survey: The Search for the Most Extreme Binary White Dwarfs**
Yale University (New Haven, CT, USA) *Nov. 11, 2015*
- **The ELM Survey: A Targeted Search for the Most Extreme White Dwarf Binary Systems**
Wesleyan University (Middletown, CT, USA) *Feb. 25, 2015*
- **Searching for the Shortest Period Binary White Dwarfs: The Latest Highlights from the ELM Survey**
Columbia University (New York, NY, USA) *Nov. 13, 2014*
- **The Shortest Period Binary White Dwarfs: Sources of Gravitational Waves and Underluminous Supernovae**
University of Texas at Arlington (Arlington, TX, USA) *Apr. 16, 2014*
- **An Update on the ELM Survey: Searching for the Shortest Period Binary White Dwarfs**
National Optical Astronomy Observatory (Tucson, AZ, USA) *Jan. 31, 2014*
- **Gravitational Waves and Underluminous Supernovae Explosions from Extremely Low Mass White Dwarfs**
University of North Texas (Denton, TX, USA) *Dec. 3, 2013*

- **Gravitational Waves and Underluminous Supernovae Explosions from Extremely Low Mass White Dwarfs**
Université de Montréal (Montréal, QC, Canada) *Sept. 19, 2013*
- **The ELM Survey: Searching for Type Ia Progenitors and Gravitational Wave Sources**
University of Toronto (Toronto, ON, Canada) *Jun. 11, 2013*
- **The ELM Survey: Searching for Type Ia Progenitors and Gravitational Wave Sources**
Northwestern University (Evanston, IL, USA) *Apr. 11, 2013*
- **The ELM Survey: Searching for Type Ia Progenitors and Gravitational Wave Sources**
Gemini Observatory (Hilo, HI, USA) *Feb. 8, 2013*

Conference Talks

Invited

- **A Progress Report on the Search for the Most Extreme Binary White Dwarfs**
11th International LISA Symposium (Zurich, Switzerland) *Sept. 2016*

Contributed

- **The Search for the Shortest Period Binary White Dwarfs: The Latest Results from the ELM Survey**
7th Meeting on Hot Subdwarfs and Related Objects (Oxford, United Kingdom) *Jul. 2015*
- **The Search for the Shortest Period Binary White Dwarfs: The Latest Results from the ELM Survey**
19th European White Dwarf Workshop (Montréal, QC, Canada) *Aug. 2014*
- **The Link Between Underluminous Supernovae Explosions, Gravitational Waves and Extremely Low Mass White Dwarfs**
27th Texas Symposium on Relativistic Astrophysics (Dallas, TX, USA) *Dec. 2013*
- **A WD Planet Search using WISE/Spitzer**
221st Meeting of the American Astronomical Society (Long Beach, CA, USA) *Jan. 2013*
- **A Spectroscopic Survey of Bright DA White Dwarfs**
17th European White Dwarf Workshop (Tuebingen, Germany) *Aug. 2010*
- **Spectroscopic Analysis of DA+dM Binary Systems**
Annual Meeting of the Canadian Astronomical Society (Toronto, ON, Canada) *May 2009*
- **Spectroscopic Analysis of DA White Dwarfs from the McCook & Sion Catalog**
16th European White Dwarf Workshop (Barcelona, Spain) *Jul. 2008*
- **A Progress Report on the Empirical Determination of the ZZ Ceti Instability Strip**
15th European White Dwarf Workshop (Leicester, United Kingdom) *Aug. 2006*

Participation in Workshops and Conferences

- **11th International LISA Symposium**
ETH Zurich and University of Zurich Zurich, Switzerland
September 5 – 9, 2016
- **SciCoder 8 Workshop**
Yale University New Haven, CT, USA
August 1 – 5, 2016
- **7th Meeting on Hot Subdwarfs and Related Objects**
University of Oxford Oxford, UK
July 19 – 25, 2015
- **19th European White Dwarf Workshop**
Université de Montréal Montréal, QC, Canada
August 11 – 15, 2014
- **27th Texas Symposium on Relativistic Astrophysics**
University of Texas at Dallas Dallas, TX, USA
December 8 – 13, 2013
- **221st Meeting of the American Astronomical Society**
American Astronomical Society Long Beach, CA, USA
January 6 – 10, 2013
- **18th European White Dwarf Workshop**
Pedagogical University of Cracow Krakow, Poland
August 13 – 17, 2012
- **Annual Meeting of the Canadian Astronomical Society**
University of Western Ontario London, ON, Canada
May 30 – June 2, 2011
- **17th European White Dwarf Workshop**
Eberhard Karls University, Tübingen Tübingen, Germany
August 16 – 20, 2010
- **Annual Meeting of the Canadian Astronomical Society**
University of Toronto Toronto, ON, Canada
May 26 – 29, 2009
- **16th European White Dwarf Workshop**
Polytechnic University of Catalonia Barcelona, Spain
June 30 – July 4, 2008
- **Annual Meeting of the Canadian Astronomical Society**
Royal Military College Kingston, ON, Canada
June 5 – 8, 2007
- **15th European White Dwarf Workshop**
University of Leicester Leicester, United Kingdom
August 7 – 11, 2006
- **Annual Meeting of the Canadian Astronomical Society**
Université de Montréal Montréal, QC, Canada
May 15 – 17, 2005
- **14th European White Dwarf Workshop**
University of Kiel Kiel, Germany
July 19 – 23, 2004

Observing Experience

- **Observatoire du Mont Mégantic 1.6m Telescope**
Boller & Chivens Spectrograph >100 nights
Mont Mégantic, QC, Canada
- **Steward Observatory 2.3m Bok Telescope**
Boller & Chivens Spectrograph ≈80 nights
Kitt Peak, AZ, USA
- **Kitt Peak National Observatory 4m Mayall Telescope**
RC Spectrograph & KOSMOS 29 nights
Kitt Peak, AZ, USA
- **European Southern Observatory 3.6m Telescope**
EFOSC 4 nights
La Silla, Chile

- **Carnegie Observatories 2.4m du Pont Telescope** 5 nights
Boller & Chivens Spectrograph *Las Campanas, Chile*
- **W. M. Keck Observatory, Keck I Telescope** 1.5 nights
LRIS and HIRESb *Mauna Kea, HI, USA*
- **Michigan-Dartmouth-MIT 2.4m Hiltner Telescope** 13 nights
CCDS Spectrograph *Kitt Peak, AZ, USA*
- **Steward Observatory 1.6m Kuiper Telescope** 5 nights
Mont4K CCD Photometer *Mt. Bigelow, AZ, USA*

Other Research Experience

- **NSERC Undergraduate Student Research Award** McGill University
May 2003 – Aug. 2003
 - Advisors: Robert Moore, Tanvir Rahman
 - Simulations of electric fields with ElecNet
- **3rd Year Honours Physics Project** McGill University
Sept. 2002 – April 2003
 - Advisor: John Crawford
 - Simulations of ion dynamics in an RF electromagnetic trap

Interviews and Media Relations

- **Helium's Role in the Pulsation of Early White Dwarfs** WebFeature
Gemini Observatory *May 11, 2016*
- **Mystery of a Dimming White Dwarf** AAS Nova Highlight
American Astronomical Society *Dec. 2, 2015*
- **A Pair of Stellar Corpses Surrenders Secrets** WebFeature
Gemini Observatory *Oct. 21, 2014*
- **Gemini Reveals a Gravitational Wave Source in Hiding** WebFeature
Gemini Observatory *June 16, 2014*
- **J075141 and J174140: Doubling Down With Rare White Dwarf Systems** Photo Album
Chandra X-Ray Observatory Image Release *Dec. 13, 2013*
- **Elderly Couple Kicked Out of the Galaxy** Astrophile
NewScientist Weekly Online Article *Aug. 16, 2013*
- **Vulgaires Scientifiques** CHOQ.FM
Université du Québec à Montréal Student Radio Show *April 22, 2009*
- **A Typical Night of Observing at the OMM** Quartier Libre
Université de Montréal Student Newspaper Article *Jan. 30, 2008*
- **Searching For Your Star** Dire Magazine
Université de Montréal Student Magazine Article *July 1, 2005*
- **White Dwarfs: Dying Stars** Forum en Clips
Université de Montréal Video News Clip *May 20, 2005*

- **Les Années Lumière**
Weekly National French-language Science Radio Show

Radio-Canada
May 8, 2005

Public Outreach Activities

- **Stellar Autopsy at the OMM** Boisbriand, QC, Canada
Invited talk at the Boisbriand Astronomy Club Sept. 23, 2009
- **Stellar Autopsy at the OMM** Notre-Dame-des-Bois, QC, Canada
Invited talk at the OMM Super Astronomy Festival July 4, 2009
- **White Dwarf Stars: How and Why We Observe Them** Montréal, QC, Canada
Invited talk at the Royal Astronomical Society of Canada Dec 17, 2006
- **White Dwarf Stars: How and Why We Observe Them** Montréal, QC, Canada
Invited talk at the Montreal Astronomical Society Dec 12, 2005

Technical Skills

- **Languages**
 - English, French, Greek, Spanish (intermediate)
- **Operating Systems**
 - Windows, Unix/Linux
- **Programming & Markup Languages**
 - Fortran77 (proficient), Python (novice), R (novice)
 - L^AT_EX, HTML (novice)
- **Specialized Astronomy Software**
 - IRAF, SuperMongo, nfftls, Period04