List of Publications

Michael H. Montgomery

Note: Titles of papers are hyperlinked to their NASA ADS abstracts

Refereed Papers

"Fluid Mixing during Phase Separation in Crystallizing White Dwarfs," **Montgomery**, **M. H.** & Dunlap, B. H., 2024, ApJ, 961(2), 197

"Asteroseismological analysis of the polluted ZZ Ceti star G 29 - 38 with TESS," Uzundag, M., De Gerónimo, F. C., Córsico, A. H., Silvotti, R., Bradley, P. A., **Montgomery**, **M. H.**, Catelan, M., Toloza, O., Bell, K. J., Kepler, S. O., Althaus, L. G., Kleinman, S. J., Kilic, M., Mullally, S. E., Gänsicke, B. T., Bąkowska, K., Barber, S., & Nitta, A., 2023, MNRAS, 526(2), 2846-2862

"Density measurements for the National Ignition Facility (NIF) opacity platform," Opachich, Y. P., Heeter, R. F., Johns, H. M., Dodd, E. S., Kline, J. L., Krasheninnikova, N. S., Mayes, D. C., **Montgomery**, **M. H.**, Winget, D. E., Urbatsch, T. J., & Perry, T. S., 2022, Review of Scientific Instruments, 93(11), 113515

"Measuring He I Stark Line Shapes in the Laboratory to Examine Differences in Photometric and Spectroscopic DB White Dwarf Masses," Schaeuble, M. A., Nagayama, T., Bailey, J. E., Gigosos, M. A., Florido, R., Blouin, S., Gomez, T. A., Dunlap, B., **Montgomery**, **M. H.**, & Winget, D. E., 2022, ApJ, 940(2), 181

"Quadratic Zeeman effect in hydrogen at 2-3 MG magnetic fields," Ivanov, V. V., Mancini, R. C., Huerta, N. A., Swanson, K. J., Winget, D. E., **Montgomery**, **M. H.**, Golovkin, I. E., Hariharan, H. K., & Berbel, Z. S., 2022, Phys. Rev. E, 106(4), 045206

"Kepler and TESS Observations of PG 1159-035," Oliveira da Rosa, G., Kepler, S. O., Córsico, A. H., Costa, J. E. S., Hermes, J. J., Kawaler, S. D., Bell, K. J., **Montgomery**, **M. H.**, Provencal, J. L., Winget, D. E., Handler, G., Dunlap, B., Clemens, J. C., & Uzundag, M., 2022, ApJ, 936(2), 187

"The Pulsating Helium-atmosphere White Dwarfs. I. New DBVs from the Sloan Digital Sky Survey," Vanderbosch, Z. P., Hermes, J. J., Winget, D. E., **Montgomery**, **M. H.**, Bell, K. J., Nitta, A., & Kepler, S. O., 2022, ApJ, 927(2), 158

"Simulation of Stark-broadened Hydrogen Balmer-line Shapes for DA White Dwarf Synthetic Spectra," Cho, P. B., Gomez, T. A., **Montgomery**, **M. H.**, Dunlap, B. H., Axen, M. F., Hobbs, B., Hubeny, I., & Winget, D. E., 2022, ApJ, 927(1), 70

"Hydrogen Line Shape Uncertainties in White Dwarf Model Atmospheres," **Montgomery**, **M. H.**, Dunlap, B. H., Cho, P. B., & Gomez, T. A., 2022, Frontiers in Astronomy and Space Sciences, 9

"Pulsating hydrogen-deficient white dwarfs and pre-white dwarfs observed with TESS. III. Asteroseismology of the DBV star GD 358," Córsico, A. H., Uzundag, M., Kepler, S. O., Silvotti, R., Althaus, L. G., Koester, D., Baran, A. S., Bell, K. J., Bischoff-Kim, A., Hermes, J. J., Kawaler, S. D., Provencal, J. L., Winget, D. E., **Montgomery**, **M. H.**, Bradley, P. A., Kleinman, S. J., & Nitta, A., 2022, A&A, 659, A30

"All-Order Full-Coulomb Quantum Spectral Line-Shape Calculations," Gomez, T. A., Nagayama, T., Cho, P. B., Zammit, M. C., Fontes, C. J., Kilcrease, D. P., Bray, I., Hubeny, I., Dunlap, B. H., **Montgomery**, **M. H.**, & Winget, D. E., 2021, Phys. Rev. Lett., 127, 235001

"Identifying Periodic Variable Stars and Eclipsing Binary Systems with Long-term Las Cumbres Observatory Photometric Monitoring of ZTF J0139+5245," Sanghi, A., Vanderbosch, Z. P., & **Montgomery**, **M. H.**,

2021, AJ, 162(4), 133

"I Spy Transits and Pulsations: Empirical Variability in White Dwarfs Using Gaia and the Zwicky Transient Facility," Guidry, J. A., Vanderbosch, Z. P., Hermes, J. J., Barlow, B. N., Lopez, I. D., Boudreaux, T. M., Corcoran, K. A., Bell, K. J., **Montgomery**, **M. H.**, Heintz, T. M., Castanheira, B. G., Reding, J. S., Dunlap, B. H., Winget, D. E., Winget, K. I., & Kuehne, J. W., 2021, ApJ, 912(2), 125

"On the Impact of ^{22}Ne on the Pulsation Periods of Carbon-Oxygen White Dwarfs with Helium-dominated Atmospheres," Chidester, M. T., Timmes, F. X., Schwab, J., Townsend, R. H. D., Farag, E., Thoul, A., Fields, C. E., Bauer, E. B., & **Montgomery**, **M. H.**, 2021, ApJ, 910(1), 24

"The Pulsating White Dwarf G117-B15A: Still the Most Stable Optical Clock Known," Kepler, S. O., Winget, D. E., Vanderbosch, Z. P., Castanheira, B. G., Hermes, J. J., Bell, K. J., Mullally, F., Romero, A. D., **Montgomery**, **M. H.**, DeGennaro, S., Winget, K. I., Chandler, D., Jeffery, E. J., Fritzen, J. K., Williams, K. A., Chote, P., & Zola, S., 2021, ApJ, 906(1), 7

"A White Dwarf with Transiting Circumstellar Material Far outside the Roche Limit," Vanderbosch, Z., Hermes, J. J., Dennihy, E., Dunlap, B. H., Izquierdo, P., Tremblay, P. E., Cho, P. B., Gänsicke, B. T., Toloza, O., Bell, K. J., **Montgomery**, **M. H.**, & Winget, D. E., 2020, ApJ, 897(2), 171

"Limits on Mode Coherence in Pulsating DA White Dwarfs Due to a Nonstatic Convection Zone," **Montgomery**, **M. H.**, Hermes, J. J., Winget, D. E., Dunlap, B. H., & Bell, K. J., 2020, ApJ, 890(1), 11

"Illuminating White Dwarf Spectra through Laboratory Experiments at Cosmic Conditions," Winget, D. E., **Montgomery**, **M. H.**, Dunlap, B. H., Cho, P. B., Schaeuble, M. A., & Gomez, T. A., 2020, High Energy Density Physics, 37, 100853

"TESS first look at evolved compact pulsators. Asteroseismology of the pulsating helium-atmosphere white dwarf TIC 257459955," Bell, K. J., Córsico, A. H., Bischoff-Kim, A., Althaus, L. G., Bradley, P. A., Calcaferro, L. M., **Montgomery**, **M. H.**, Uzundag, M., Baran, A. S., Bognár, Z., Charpinet, S., Ghasemi, H., & Hermes, J. J., 2019, A&A, 632, A42

"Hβ and Hγ Absorption-line Profile Inconsistencies in Laboratory Experiments Performed at White Dwarf Photosphere Conditions," Schaeuble, M. A., Nagayama, T., Bailey, J. E., Gomez, T. A., **Montgomery**, **M. H.**, & Winget, D. E., 2019, ApJ, 885(1), 86

"GD358: Three Decades of Observations for the In-depth Asteroseismology of a DBV Star," Bischoff-Kim, A., Provencal, J. L., Bradley, P. A., **Montgomery**, **M. H.**, Shipman, H. L., Harrold, S. T., Howard, B., Strickland, W., Chandler, D., Campbell, D., Arredondo, A., Linn, R., Russell, D. P., Doyle, D., Brickhouse, A., Peters, D., Kim, S.-L., Jiang, X. J., Mao, Y.-N., Kusakin, A. V., Sergeev, A. V., Andreev, M., Velichko, S., Janulis, R., Pakstiene, E., Aliçavuş, F., Horoz, N., Zola, S., Ogłoza, W., Koziel-Wierzbowska, D., Kundera, T., Jableka, D., Debski, B., Baran, A., Meingast, S., Nagel, T., Loebling, L., Heinitz, C., Hoyer, D., Bognár, Z., Castanheira, B. G., & Erdem, A., 2019, ApJ, 871, 13

"Wandering near the red edge: photometric observations of three cool ZZ Ceti stars," Bognár, Z., Paparó, M., Sódor, Á., Jenei, D. I., Kalup, C., Bertone, E., Chavez-Dagostino, M., **Montgomery**, **M. H.**, Győrffy, Á., Molnár, L., Ollé, H., Pápics, P. I., Plachy, E., & Verebélyi, E., 2019, MNRAS, 482(3), 4018-4031

"Molecular nucleation theory of dust formation in core-collapse supernovae applied to SN 1987A," Sluder, A., Milosavljević, M., & **Montgomery**, **M. H.**, 2018, MNRAS, 480, 5580-5624

"Outliers: multicolour photometry guiding the search for evolved binary systems in the globular cluster 47

Tucanae," Campos, F., Pelisoli, I., Kamann, S., Husser, T.-O., Dreizler, S., Bellini, A., Robinson, E. L., Nardiello, D., Piotto, G., Kepler, S. O., Istrate, A. G., Winget, D. E., **Montgomery**, **M. H.**, & Dotter, A., 2018, MNRAS, 481, 4397-4409

"The McDonald Observatory search for pulsating sdA stars. Asteroseismic support for multiple populations," Bell, K. J., Pelisoli, I., Kepler, S. O., Brown, W. R., Winget, D. E., Winget, K. I., Vanderbosch, Z., Castanheira, B. G., Hermes, J. J., & **Montgomery**, **M. H.**, 2018, A&A, 617, A6

"Density-matrix correlations in the relaxation theory of electron broadening," Gomez, T. A., Nagayama, T., Kilcrease, D. P., **Montgomery**, **M. H.**, & Winget, D. E., 2018, Phys. Rev. A, 98(1), 012505

"WDEC: A Code for Modeling White Dwarf Structure and Pulsations," Bischoff-Kim, A. & **Montgomery**, **M. H.**, 2018, AJ, 155, 187

"Matrix Methods for Solving Hartree-Fock Equations in Atomic Structure Calculations and Line Broadening," Gomez, T., Nagayama, T., Fontes, C., Kilcrease, D., Hansen, S., **Montgomery, M.**, & Winget, D., 2018, Atoms, 6, 22

"Mixing and overshooting in surface convection zones of DA white dwarfs: first results from ANTARES," Kupka, F., Zaussinger, F., & **Montgomery**, **M. H.**, 2018, MNRAS, 474, 4660-4671

"White dwarf variability with gPhoton: pulsators," Tucker, M. A., Fleming, S. W., Pelisoli, I., Romero, A., Bell, K. J., Kepler, S. O., Caton, D. B., Debes, J., **Montgomery**, **M. H.**, Thompson, S. E., Koester, D., Million, C., & Shiao, B., 2018, MNRAS, 475, 4768-4780

"Destroying Aliases from the Ground and Space: Super-Nyquist ZZ Cetis in K2 Long Cadence Data," Bell, K. J., Hermes, J. J., Vanderbosch, Z., **Montgomery**, **M. H.**, Winget, D. E., Dennihy, E., Fuchs, J. T., & Tremblay, P.-E., 2017, ApJ, 851, 24

"White Dwarf Rotation as a Function of Mass and a Dichotomy of Mode Line Widths: Kepler Observations of 27 Pulsating DA White Dwarfs through K2 Campaign 8," Hermes, J. J., Gänsicke, B. T., Kawaler, S. D., Greiss, S., Tremblay, P.-E., Gentile Fusillo, N. P., Raddi, R., Fanale, S. M., Bell, K. J., Dennihy, E., Fuchs, J. T., Dunlap, B. H., Clemens, J. C., **Montgomery**, **M. H.**, Winget, D. E., Chote, P., Marsh, T. R., & Redfield, S., 2017, ApJS, 232, 23

"Evidence from K2 for Rapid Rotation in the Descendant of an Intermediate-mass Star," Hermes, J. J., Kawaler, S. D., Romero, A. D., Kepler, S. O., Tremblay, P.-E., Bell, K. J., Dunlap, B. H., **Montgomery**, **M. H.**, Gänsicke, B. T., Clemens, J. C., Dennihy, E., & Redfield, S., 2017, ApJ, 841, L2

"Nonradial and radial period changes of the δ Scuti star 4 CVn. II. Systematic behavior over 40 years," Breger, M., **Montgomery**, **M. H.**, Lenz, P., & Pamyatnykh, A. A., 2017, A&A, 599, A116

"Pruning The ELM Survey: Characterizing Candidate Low-mass White Dwarfs through Photometric Variability," Bell, K. J., Gianninas, A., Hermes, J. J., Winget, D. E., Kilic, M., **Montgomery**, **M. H.**, Castanheira, B. G., Vanderbosch, Z., Winget, K. I., & Brown, W. R., 2017, ApJ, 835, 180

"Outbursts in Two New Cool Pulsating DA White Dwarfs," Bell, K. J., Hermes, J. J., **Montgomery**, **M. H.**, Gentile Fusillo, N. P., Raddi, R., Gänsicke, B. T., Winget, D. E., Dennihy, E., Gianninas, A., Tremblay, P.-E., Chote, P., & Winget, K. I., 2016, ApJ, 829, 82

"Effect of higher-order multipole moments on the Stark line shape," Gomez, T. A., Nagayama, T., Kilcrease, D. P., **Montgomery**, **M. H.**, & Winget, D. E., 2016, Phys. Rev. A, 94, 022501

"A comparative analysis of the observed white dwarf cooling sequence from globular clusters," Campos,

F., Bergeron, P., Romero, A. D., Kepler, S. O., Ourique, G., Costa, J. E. S., Bonatto, C. J., Winget, D. E., **Montgomery**, **M. H.**, Pacheco, T. A., & Bedin, L. R., 2016, MNRAS, 456, 3729-3742

"Variability in Hot Carbon-dominated Atmosphere (Hot DQ) White Dwarfs: Rapid Rotation?," Williams, K. A., **Montgomery**, **M. H.**, Winget, D. E., Falcon, R. E., & Bierwagen, M., 2016, ApJ, 817, 27

"Science Educational Outreach Programs That Benefit Students and Scientists," Clark, G., Russell, J., Enyeart, P., Gracia, B., Wessel, A., Jarmoskaite, I., Polioudakis, D., Stuart, Y., Gonzalez, T., MacKrell, A., Rodenbusch, S., Stovall, G. M., Beckham, J. T., **Montgomery, M.**, Tasneem, T., Jones, J., Simmons, S., & Roux, S., 2016, PLoS Biology, 14, 1

"Star formation in the first galaxies - III. Formation, evolution, and characteristics of the first metal-enriched stellar cluster," Safranek-Shrader, C., **Montgomery**, **M. H.**, Milosavljević, M., & Bromm, V., 2016, MNRAS, 455, 3288-3302

"A Second Case of Outbursts in a Pulsating White Dwarf Observed by Kepler," Hermes, J. J., **Montgomery**, **M. H.**, Bell, K. J., Chote, P., Gänsicke, B. T., Kawaler, S. D., Clemens, J. C., Dunlap, B. H., Winget, D. E., & Armstrong, D. J., 2015, ApJ, 810, L5

"Insights into internal effects of common-envelope evolution using the extended Kepler mission," Hermes, J. J., Gänsicke, B. T., Bischoff-Kim, A., Kawaler, S. D., Fuchs, J. T., Dunlap, B. H., Clemens, J. C., **Montgomery**, **M. H.**, Chote, P., Barclay, T., Marsh, T. R., Gianninas, A., Koester, D., Winget, D. E., Armstrong, D. J., Rebassa-Mansergas, A., & Schreiber, M. R., 2015, MNRAS, 451, 1701

"KIC 4552982: Outbursts and Asteroseismology from the Longest Pseudo-continuous Light Curve of a ZZ Ceti," Bell, K. J., Hermes, J. J., Bischoff-Kim, A., Moorhead, S., **Montgomery**, **M. H.**, Østensen, R., Castanheira, B. G., & Winget, D. E., 2015, ApJ, 809, 14

"Laboratory Measurements of White Dwarf Photospheric Spectral Lines: Hβ," Falcon, R. E., Rochau, G. A., Bailey, J. E., Gomez, T. A., **Montgomery**, **M. H.**, Winget, D. E., & Nagayama, T., 2015, ApJ, 806, 214

"An experimental platform for creating white dwarf photospheres in the laboratory: Preliminary results," **Montgomery**, **M. H.**, Falcon, R. E., Rochau, G. A., Bailey, J. E., Gomez, T. A., Carlson, A. L., Bliss, D. E., Nagayama, T., Stein, M., & Winget, D. E., 2015, High Energy Density Physics, 17, 168

"Dark Stars: Improved Models and First Pulsation Results," Rindler-Daller, T., **Montgomery**, **M. H.**, Freese, K., Winget, D. E., & Paxton, B., 2015, ApJ, 799, 210

"Evidence of Resonant Mode Coupling and the Relationship between Low and High Frequencies in a Rapidly Rotating A Star," Breger, M. & **Montgomery**, **M. H.**, 2014, ApJ, 783, 89

"Precision Asteroseismology of the Pulsating White Dwarf GD 1212 Using a Two-wheel-controlled Kepler Spacecraft," Hermes, J. J., Charpinet, S., Barclay, T., Pakštienė, E., Mullally, F., Kawaler, S. D., Bloemen, S., Castanheira, B. G., Winget, D. E., **Montgomery**, **M. H.**, Van Grootel, V., Huber, D., Still, M., Howell, S. B., Caldwell, D. A., Haas, M. R., & Bryson, S. T., 2014, ApJ, 789, 85

"Radius Constraints from High-speed Photometry of 20 Low-mass White Dwarf Binaries," Hermes, J. J., Brown, W. R., Kilic, M., Gianninas, A., Chote, P., Sullivan, D. J., Winget, D. E., Bell, K. J., Falcon, R. E., Winget, K. I., Mason, P. A., Harrold, S. T., & **Montgomery**, **M. H.**, 2014, ApJ, 792, 39

"A new class of pulsating white dwarf of extremely low mass: the fourth and fifth members," Hermes, J. J., **Montgomery**, **M. H.**, Gianninas, A., Winget, D. E., Brown, W. R., Harrold, S. T., Bell, K. J., Kenyon, S. J.,

Kilic, M., & Castanheira, B. G., 2013, MNRAS, 436, 3573

"Modules for Experiments in Stellar Astrophysics (MESA): Planets, Oscillations, Rotation, and Massive Stars," Paxton, B., Cantiello, M., Arras, P., Bildsten, L., Brown, E. F., Dotter, A., Mankovich, C., **Montgomery**, **M. H.**, Stello, D., Timmes, F. X., & Townsend, R., 2013, ApJS, 208, 4

"Discovery of an Ultramassive Pulsating White Dwarf," Hermes, J. J., Kepler, S. O., Castanheira, B. G., Gianninas, A., Winget, D. E., **Montgomery**, **M. H.**, Brown, W. R., & Harrold, S. T., 2013, ApJ, 771, L2

"Discovery of Pulsations, Including Possible Pressure Modes, in Two New Extremely Low Mass, He-core White Dwarfs," Hermes, J. J., **Montgomery**, **M. H.**, Winget, D. E., Brown, W. R., Gianninas, A., Kilic, M., Kenyon, S. J., Bell, K. J., & Harrold, S. T., 2013, ApJ, 765, 102

"A New Timescale for Period Change in the Pulsating DA White Dwarf WD 0111+0018," Hermes, J. J., **Montgomery**, **M. H.**, Mullally, F., Winget, D. E., & Bischoff-Kim, A., 2013, ApJ, 766, 42

"Enigmatic Recurrent Pulsational Variability of the Accreting White Dwarf EQ Lyn (SDSS J074531.92+453829.6)," Mukadam, A. S., Townsley, D. M., Szkody, P., Gänsicke, B. T., Southworth, J., Brockett, T., Parsons, S., Hermes, J. J., **Montgomery**, **M. H.**, Winget, D. E., Harrold, S., Tovmassian, G., Zharikov, S., Drake, A. J., Henden, A., Rodriguez-Gil, P., Sion, E. M., Zola, S., Szymanski, T., Pavlenko, E., Aungwerojwit, A., & Qian, S.-B., 2013, AJ, 146, 54

"Photometric Variability in a Warm, Strongly Magnetic DQ White Dwarf, SDSS J103655.39+652252.2," Williams, K. A., Winget, D. E., **Montgomery**, **M. H.**, Dufour, P., Kepler, S. O., Hermes, J. J., Falcon, R. E., Winget, K. I., Bolte, M., Rubin, K. H. R., & Liebert, J., 2013, ApJ, 769, 123

"Measuring the Evolutionary Rate of Cooling of ZZ Ceti," Mukadam, A. S., Bischoff-Kim, A., Fraser, O., Córsico, A. H., **Montgomery**, **M. H.**, Kepler, S. O., Romero, A. D., Winget, D. E., Hermes, J. J., Riecken, T. S., Kronberg, M. E., Winget, K. I., Falcon, R. E., Chandler, D. W., Kuehne, J. W., Sullivan, D. J., Reaves, D., von Hippel, T., Mullally, F., Shipman, H., Thompson, S. E., Silvestri, N. M., & Hynes, R. I., 2013, ApJ, 771, 17

"An experimental platform for creating white dwarf photospheres in the laboratory," Falcon, R. E., Rochau, G. A., Bailey, J. E., Ellis, J. L., Carlson, A. L., Gomez, T. A., **Montgomery**, **M. H.**, Winget, D. E., Chen, E. Y., Gomez, M. R., & Nash, T. J., 2013, High Energy Density Physics, 9, 82-90

"Time series photometry of the helium atmosphere pulsating white dwarf EC 04207-4748," Chote, P., Sullivan, D. J., **Montgomery**, **M. H.**, & Provencal, J. L., 2013, MNRAS

"A Gravitational Redshift Determination of the Mean Mass of White Dwarfs: DBA and DB Stars," Falcon, R. E., Winget, D. E., **Montgomery**, **M. H.**, & Williams, K. A., 2012, ApJ, 757, 116

"Empirical Determination of Convection Parameters in White Dwarfs. I. Whole Earth Telescope Observations of EC14012-1446," Provencal, J. L., **Montgomery**, **M. H.**, Kanaan, A., Thompson, S. E., Dalessio, J., Shipman, H. L., Childers, D., Clemens, J. C., Rosen, R., Henrique, P., Bischoff-Kim, A., Strickland, W., Chandler, D., Walter, B., Watson, T. K., Castanheira, B., Wang, S., Handler, G., Wood, M., Vennes, S., Nemeth, P., Kepler, S. O., Reed, M., Nitta, A., Kleinman, S. J., Brown, T., Kim, S.-L., Sullivan, D., Chen, W. P., Yang, M., Shih, C. Y., Jiang, X. J., Sergeev, A. V., Maksim, A., Janulis, R., Baliyan, K. S., Vats, H. O., Zola, S., Baran, A., Winiarski, M., Ogloza, W., Paparo, M., Bognar, Z., Papics, P., Kilkenny, D., Sefako, R., Buckley, D., Loaring, N., Kniazev, A., Silvotti, R., Galleti, S., Nagel, T., Vauclair, G., Dolez, N., Fremy, J. R., Perez, J., Almenara, J. M., & Fraga, L., 2012, ApJ, 751, 91

"SDSS J184037.78+642312.3: The First Pulsating Extremely Low Mass White Dwarf," Hermes, J. J., **Montgomery**, **M. H.**, Winget, D. E., Brown, W. R., Kilic, M., & Kenyon, S. J., 2012, ApJ, 750, L28

"Two New Tidally Distorted White Dwarfs," Hermes, J. J., Kilic, M., Brown, W. R., **Montgomery**, **M. H.**, & Winget, D. E., 2012, ApJ, 749, 42

"ASTRONOMY: Shooting for the Stars," **Montgomery**, **M. H.**, 2011, Science, 332(6026), 180

"Discovery of a New AM CVn System with the Kepler Satellite," Fontaine, G., Brassard, P., Green, E. M., Charpinet, S., Dufour, P., Hubeny, I., Steeghs, D., Aerts, C., Randall, S. K., Bergeron, P., Guvenen, B., O'Malley, C. J., Van Grootel, V., Østensen, R. H., Bloemen, S., Silvotti, R., Howell, S. B., Baran, A., Kepler, S. O., Marsh, T. R., **Montgomery**, **M. H.**, Oreiro, R., Provencal, J., Telting, J., Winget, D. E., Zima, W., Christensen-Dalsgaard, J., & Kjeldsen, H., 2011, ApJ, 726, 92

"The pulsations of PG 1351+489," Redaelli, M., Kepler, S. O., Costa, J. E. S., Winget, D. E., Handler, G., Castanheira, B. G., Kanaan, A., Fraga, L., Henrique, P., Giovannini, O., Provencal, J. L., Shipman, H. L., Dalessio, J., Thompson, S. E., Mullally, F., Brewer, M. M., Childers, D., Oksala, M. E., Rosen, R., Wood, M. A., Reed, M. D., Walter, B., Strickland, W., Chandler, D., Watson, T. K., Nather, R. E., **Montgomery**, **M. H.**, Bischoff-Kim, A., Hansen, C. J., Nitta, A., Kleinman, S. J., Claver, C. F., Brown, T. M., Sullivan, D. J., Kim, S.-L., Chen, W.-P., Yang, M., Shih, C.-Y., Zhang, X., Jiang, X., Fu, J. N., Seetha, S., Ashoka, B. N., Marar, T. M. K., Baliyan, K. S., Vats, H. O., Chernyshev, A. V., Ibbetson, P., Leibowitz, E., Hemar, S., Sergeev, A. V., Andreev, M. V., Janulis, R., Meištas, E. G., Moskalik, P., Pajdosz, G., Baran, A., Winiarski, M., Zola, S., Ogloza, W., Siwak, M., Bognár, Z., Solheim, J.-E., Sefako, R., Buckley, D., O'Donoghue, D., Nagel, T., Silvotti, R., Bruni, I., Fremy, J. R., Vauclair, G., Chevreton, M., Dolez, N., Pfeiffer, B., Barstow, M. A., Creevey, O. L., Kawaler, S. D., & Clemens, J. C., 2011, MNRAS, 415, 1220

"Evidence for Temperature Change and Oblique Pulsation from Light Curve Fits of the Pulsating White Dwarf GD 358," **Montgomery**, **M. H.**, Provencal, J. L., Kanaan, A., Mukadam, A. S., Thompson, S. E., Dalessio, J., Shipman, H. L., Winget, D. E., Kepler, S. O., & Koester, D., 2010, ApJ, 716, 84

"A Gravitational Redshift Determination of the Mean Mass of White Dwarfs. DA Stars," Falcon, R. E., Winget, D. E., **Montgomery**, **M. H.**, & Williams, K. A., 2010, ApJ, 712, 585

"Pulsational Mapping of Calcium Across the Surface of a White Dwarf," Thompson, S. E., **Montgomery**, **M. H.**, von Hippel, T., Nitta, A., Dalessio, J., Provencal, J., Strickland, W., Holtzman, J. A., Mukadam, A., Sullivan, D., Nagel, T., Koziel-Wierzbowska, D., Kundera, T., Zola, S., Winiarski, M., Drozdz, M., Kuligowska, E., Ogloza, W., Bognár, Z., Handler, G., Kanaan, A., Ribeira, T., Rosen, R., Reichart, D., Haislip, J., Barlow, B. N., Dunlap, B. H., Ivarsen, K., LaCluyze, A., & Mullally, F., 2010, ApJ, 714, 296

"Finding the Instability Strip for Accreting Pulsating White Dwarfs From Hubble Space Telescope and Optical Observations," Szkody, P., Mukadam, A., Gänsicke, B. T., Henden, A., Templeton, M., Holtzman, J., **Montgomery**, **M. H.**, Howell, S. B., Nitta, A., Sion, E. M., Schwartz, R. D., & Dillon, W., 2010, ApJ, 710, 64

"The Physics of Crystallization From Globular Cluster White Dwarf Stars in NGC 6397," Winget, D. E., Kepler, S. O., Campos, F., **Montgomery**, **M. H.**, Girardi, L., Bergeron, P., & Williams, K., 2009, ApJ, 693, L6

"2006 Whole Earth Telescope Observations of GD358: A New Look at the Prototype DBV," Provencal, J. L., **Montgomery**, **M. H.**, Kanaan, A., Shipman, H. L., Childers, D., Baran, A., Kepler, S. O., Reed, M., Zhou, A., Eggen, J., Watson, T. K., Winget, D. E., Thompson, S. E., Riaz, B., Nitta, A., Kleinman, S. J., Crowe,

R., Slivkoff, J., Sherard, P., Purves, N., Binder, P., Knight, R., Kim, S. ., Chen, W.-P., Yang, M., Lin, H. C., Lin, C. C., Chen, C. W., Jiang, X. J., Sergeev, A. V., Mkrtichian, D., Andreev, M., Janulis, R., Siwak, M., Zola, S., Koziel, D., Stachowski, G., Paparo, M., Bognar, Z., Handler, G., Lorenz, D., Steininger, B., Beck, P., Nagel, T., Kusterer, D., Hoffman, A., Reiff, E., Kowalski, R., Vauclair, G., Charpinet, S., Chevreton, M., Solheim, J. E., Pakstiene, E., Fraga, L., & Dalessio, J., 2009, ApJ, 693, 564

"ASTRONOMY: The Pulse of Distant Stars," **Montgomery**, **M. H.**, 2008, Science, 322(5901), 536

"Constraining the Surface Inhomogeneity and Settling Times of Metals on Accreting White Dwarfs," **Montgomery**, **M. H.**, Thompson, S. E., & von Hippel, T., 2008, ApJ, 685, L133

"SDSS J142625.71+575218.3: A Prototype for a New Class of Variable White Dwarf," **Montgomery**, **M. H.**, Williams, K. A., Winget, D. E., Dufour, P., DeGennaro, S., & Liebert, J., 2008, ApJ, 678, L51

"A three-site photometric campaign on the ZZ Ceti star WD 1524-0030," Handler, G., Provencal, J. L., Lendl, M., **Montgomery**, **M. H.**, & Beck, P., 2008, Communications in Asteroseismology, 156, 18

"Strong Limits on the DFSZ Axion Mass with G117-B15A," Bischoff-Kim, A., **Montgomery**, **M. H.**, & Winget, D. E., 2008, ApJ, 675, 1512

"Fine Grid Asteroseismology of G117-B15A and R548," Bischoff-Kim, A., **Montgomery**, **M. H.**, & Winget, D. E., 2008, ApJ, 675, 1505

"What We Can Learn from the Light Curves of GD 358 and PG 1351+489," **Montgomery**, **M. H.**, 2008, Communications in Asteroseismology, 154, 38

"Whole Earth Telescope observations of the hot helium atmosphere pulsating white dwarf EC20058-5234," Sullivan, D. J., Metcalfe, T. S., O'Donoghue, D., Winget, D. E., Kilkenny, D., van Wyk, F., Kanaan, A., Kepler, S. O., Nitta, A., Kawaler, S. D., **Montgomery**, **M. H.**, Nather, R. E., O'Brien, M. S., Bischoff-Kim, A., Wood, M., Jiang, X. J., Leibowitz, E. M., Ibbetson, P., Zola, S., Krzesinski, J., Pajdosz, G., Vauclair, G., Dolez, N., & Chevreton, M., 2008, MNRAS, 387, 137

"The pulsation modes of the pre-white dwarf PG 1159-035," Costa, J. E. S., Kepler, S. O., Winget, D. E., O'Brien, M. S., Kawaler, S. D., Costa, A. F. M., Giovannini, O., Kanaan, A., Mukadam, A. S., Mullally, F., Nitta, A., Provençal, J. L., Shipman, H., Wood, M. A., Ahrens, T. J., Grauer, A., Kilic, M., Bradley, P. A., Sekiguchi, K., Crowe, R., Jiang, X. J., Sullivan, D., Sullivan, T., Rosen, R., Clemens, J. C., Janulis, R., O'Donoghue, D., Ogloza, W., Baran, A., Silvotti, R., Marinoni, S., Vauclair, G., Dolez, N., Chevreton, M., Dreizler, S., Schuh, S., Deetjen, J., Nagel, T., Solheim, J.-E., Gonzalez Perez, J. M., Ulla, A., Barstow, M., Burleigh, M., Good, S., Metcalfe, T. S., Kim, S.-L., Lee, H., Sergeev, A., Akan, M. C., Çakırlı, Ö., Paparo, M., Viraghalmy, G., Ashoka, B. N., Handler, G., Hürkal, Ö., Johannessen, F., Kleinman, S. J., Kalytis, R., Krzesinski, J., Klumpe, E., Larrison, J., Lawrence, T., Meištas, E., Martinez, P., Nather, R. E., Fu, J.-N., Pakštienė, E., Rosen, R., Romero-Colmenero, E., Riddle, R., Seetha, S., Silvestri, N. M., Vučković, M., Warner, B., Zola, S., Althaus, L. G., Córsico, A. H., & **Montgomery**, **M. H.**, 2008, A&A, 477, 627

"Mapping Convection using Pulsating White Dwarf Stars," **Montgomery**, **M. H.**, 2007, Communications in Asteroseismology, 150, 253

"Ensemble Characteristics of the ZZ Ceti Stars," Mukadam, A. S., **Montgomery**, **M. H.**, Winget, D. E., Kepler, S. O., & Clemens, J. C., 2006, ApJ, 640, 956

"A New Technique for Probing Convection in Pulsating White Dwarf Stars," **Montgomery**, **M. H.**, 2005, ApJ, 633, 1142

"DQ Herculis in Profile: Whole Earth Telescope Observations and Smoothed Particle Hydrodynamics Simulations of an Edge-on Cataclysmic Variable System," Wood, M. A., Robertson, J. R., Simpson, J. C., Kawaler, S. D., O'Brien, M. S., Nather, R. E., Winget, D. E., **Montgomery**, **M. H.**, Metcalfe, T. S., Jiang, X. J., Leibowitz, E. M., Ibbetson, P., O'Donoghue, D., Zoła, S., Krzesiński, J., Pajdosz, G., Vauclair, G., Dolez, N., Chevreton, M., Sullivan, D. J., Kanaan, A., & Nitta, A., 2005, ApJ, 634, 570

"Atmospheric Oscillations in White Dwarfs: A New Indicator of Chromospheric Activity," Musielak, Z. E., Winget, D. E., & **Montgomery**, **M. H.**, 2005, ApJ, 630, 506

"Binaries discovered by the SPY project. IV. Five single-lined DA double white dwarfs," Nelemans, G., Napiwotzki, R., Karl, C., Marsh, T. R., Voss, B., Roelofs, G., Izzard, R. G., **Montgomery**, **M. H.**, Reerink, T., Christlieb, N., & Reimers, D., 2005, A&A, 440, 1087

"Whole Earth Telescope observations of BPM 37093: A seismological test of crystallization theory in white dwarfs," Kanaan, A., Nitta, A., Winget, D. E., Kepler, S. O., **Montgomery**, **M. H.**, Metcalfe, T. S., Oliveira, H., Fraga, L., da Costa, A. F. M., Costa, J. E. S., Castanheira, B. G., Giovannini, O., Nather, R. E., Mukadam, A., Kawaler, S. D., O'Brien, M. S., Reed, M. D., Kleinman, S. J., Provencal, J. L., Watson, T. K., Kilkenny, D., Sullivan, D. J., Sullivan, T., Shobbrook, B., Jiang, X. J., Ashoka, B. N., Seetha, S., Leibowitz, E., Ibbetson, P., Mendelson, H., Meištas, E. G., Kalytis, R., Ališauskas, D., O'Donoghue, D., Buckley, D., Martinez, P., van Wyk, F., Stobie, R., Marang, F., van Zyl, L., Ogloza, W., Krzesiński, J., Zoła, S., Moskalik, P., Breger, M., Stankov, A., Silvotti, R., Piccioni, A., Vauclair, G., Dolez, N., Chevreton, M., Deetjen, J., Dreizler, S., Schuh, S., Gonzalez Perez, J. M., Østensen, R., Ulla, A., Manteiga, M., Suarez, O., Burleigh, M. R., & Barstow, M. A., 2005, A&A, 432, 219

"New evolutionary models for massive ZZ Ceti stars. II. The effects of crystallization on their pulsational properties," Córsico, A. H., Althaus, L. G., **Montgomery**, **M. H.**, García-Berro, E., & Isern, J., 2005, A&A, 429, 277

"Redefining the Empirical ZZ Ceti Instability Strip," Mukadam, A. S., Winget, D. E., von Hippel, T., **Montgomery**, **M. H.**, Kepler, S. O., & Costa, A. F. M., 2004, ApJ, 612, 1052

"Testing White Dwarf Crystallization Theory with Asteroseismology of the Massive Pulsating DA Star BPM 37093," Metcalfe, T. S., **Montgomery**, **M. H.**, & Kanaan, A., 2004, ApJ, 605, L133

"White Dwarf Envelopes: Further Results of a Non-local Model of Convection," **Montgomery**, **M. H.** & Kupka, F., 2004, MNRAS, 350, 267

"A Strong Test of Electroweak Theory Using Pulsating DB White Dwarf Stars as Plasmon Neutrino Detectors," Winget, D. E., Sullivan, D. J., Metcalfe, T. S., Kawaler, S. D., & **Montgomery**, **M. H.**, 2004, ApJ, 602, L109-L112

"Observations of the Pulsating White Dwarf G 185-32," Castanheira, B. G., Kepler, S. O., Moskalik, P., Zoła, S., Pajdosz, G., Krzesiński, J., O'Donoghue, D., Katz, M., Buckley, D., Vauclair, G., Dolez, N., Chevreton, M., Barstow, M. A., Kanaan, A., Giovannini, O., Provencal, J., Kawaler, S. D., Clemens, J. C., Nather, R. E., Winget, D. E., Watson, T. K., Yanagida, K., Dixson, J. S., Hansen, C. J., Bradley, P. A., Wood, M. A., Sullivan, D. J., Kleinman, S. J., Meistas, E., Solheim, J.-E., Bruvold, A., Leibowitz, E., Mazeh, T., Koester, D., & **Montgomery**, **M. H.**, 2004, A&A, 413, 623

"The core/envelope symmetry in pulsating stars," **Montgomery**, **M. H.**, Metcalfe, T. S., & Winget, D. E., 2003, MNRAS, 344, 657

"Probing the core and envelope structure of DBV white dwarfs," Metcalfe, T. S., **Montgomery**, **M. H.**, &

Kawaler, S. D., 2003, MNRAS, 344, L88

"New evolutionary models for massive ZZ Ceti stars. I. First results for their pulsational properties," Althaus, L. G., Serenelli, A. M., Córsico, A. H., & **Montgomery**, **M. H.**, 2003, A&A, 404, 593

"The unusual pulsation spectrum of the cool ZZ Ceti star HS0507+0434B," Handler, G., Romero-Colmenero, E., & **Montgomery**, **M. H.**, 2002, MNRAS, 335, 399

"Is the helium in the variable DB white dwarfs ^{3}He?," Wolff, B., Koester, D., **Montgomery**, **M. H.**, & Winget, D. E., 2002, A&A, 388, 320

"A-star Envelopes: a Test of Local and Non-local Models of Convection," Kupka, F. & **Montgomery**, **M. H.**, 2002, MNRAS, 330, L6

"Asteroseismology of RXJ 2117+3412, the hottest pulsating PG 1159 star," Vauclair, G., Moskalik, P., Pfeiffer, B., Chevreton, M., Dolez, N., Serre, B., Kleinman, S. J., Barstow, M., Sansom, A. E., Solheim, J.-E., Belmonte, J. A., Kawaler, S. D., Kepler, S. O., Kanaan, A., Giovannini, O., Winget, D. E., Watson, T. K., Nather, R. E., Clemens, J. C., Provencal, J., Dixson, J. S., Yanagida, K., Nitta Kleinman, A., **Montgomery**, **M. H.**, Klumpe, E. W., Bruvold, A., O'Brien, M. S., Hansen, C. J., Grauer, A. D., Bradley, P. A., Wood, M. A., Achilleos, N., Jiang, S. Y., Fu, J. N., Marar, T. M. K., Ashoka, B. N., Meĭstas, E. G., Chernyshev, A. V., Mazeh, T., Leibowitz, E., Hemar, S., Krzesiński, J., Pajdosz, G., & Zoła, S., 2002, A&A, 381, 122

"The Effect of ^{3}He Diffusion on the Pulsational Spectra of DBV Models," **Montgomery**, **M. H.**, Metcalfe, T. S., & Winget, D. E., 2001, ApJ, 548, L53

"Normal modes and discovery of high-order cross-frequencies in the DBV white dwarf GD 358," Vuille, F., O'Donoghue, D., Buckley, D. A. H., Massacand, C.-M., Solheim, J.-E., Bard, S., Vauclair, G., Giovannini, O., Kepler, S. O., Kanaan, A., Provencal, J. L., Wood, M. A., Clemens, J. C., Kleinman, S. J., O'Brien, M. S., Nather, R. E., Winget, D. E., Nitta, A., Klumpe, E. W., **Montgomery**, **M. H.**, Watson, T. K., Bradley, P. A., Sullivan, D. J., Wu, K., Marar, T. M. K., Seetha, S., Ashoka, B. N., Mahra, H. S., Bhat, B. C., Babu, V. C., Leibowitz, E. M., Hemar, S., Ibbetson, P., Mashals, E., Meištas, E., Moskalik, P., Zoła, S., Krzesiński, J., & Pajdosz, G., 2000, MNRAS, 314, 689

"The Effect of Crystallization on the Pulsations of White Dwarf Stars," **Montgomery**, **M. H.** & Winget, D. E., 1999, ApJ, 526, 976

"Evolutionary Calculations of Phase Separation in Crystallizing White Dwarf Stars," **Montgomery**, **M. H.**, Klumpe, E. W., Winget, D. E., & Wood, M. A., 1999, ApJ, 525, 482

"30+ frequencies for the delta Scuti variable 4 Canum Venaticorum: results of the 1996 multisite campaign," Breger, M., Handler, G., Garrido, R., Audard, N., Zima, W., Paparó, M., Beichbuchner, F., Zhi-Ping, L., Shi-Yang, J., Zong-Li, L., Ai-Ying, Z., Pikall, H., Stankov, A., Guzik, J. A., Sperl, M., Krzesinski, J., Ogloza, W., Pajdosz, G., Zola, S., Thomassen, T., Solheim, J.-E., Serkowitsch, E., Reegen, P., Rumpf, T., Schmalwieser, A., & **Montgomery**, **M. H.**, 1999, A&A, 349, 225

"*Delta Scuti and Related Stars*," ed. M. Breger & **M. H. Montgomery**, 2000, volume 210 of *Astronomical Society of the Pacific Conference Series*

"Asteroseismology of a Star Cooled by Neutrino Emission: The Pulsating Pre–White Dwarf PG 0122+200," O'Brien, M. S., Vauclair, G., Kawaler, S. D., Watson, T. K., Winget, D. E., Nather, R. E., **Montgomery**, **M. H.**, Nitta, A., Kleinman, S. J., Sullivan, D. J., Jiang, X. J., Marar, T. M. K., Seetha, S., Ashoka, B. N., Bhattacharya, J., Leibowitz, E. M., Hemar, S., Ibbetson, P., Warner, B., van Zyl, L., Moskalik, P., Zola,

S., Pajdosz, G., Krzesinski, J., Dolez, N., Chevreton, M., Solheim, J.-E., Thomassen, T., Kepler, S. O., Giovannini, O., Provencal, J. L., Wood, M. A., & Clemens, J. C., 1998, ApJ, 495, 458

"An Empirical Test of the Theory of Crystallization in Stellar Interiors," Winget, D. E., Kepler, S. O., Kanaan, A., **Montgomery**, **M. H.**, & Giovannini, O., 1997, ApJ, 487, L191

"Complex light variations of the "hybrid" PG 1159 star HS 2324+3944.," Handler, G., Kanaan, A., & **Montgomery**, **M. H.**, 1997, A&A, 326, 692

"New Whole Earth Telescope observations of CD-24 7599: steps towards delta Scuti star seismology," Handler, G., Pikall, H., O'Donoghue, D., Buckley, D. A. H., Vauclair, G., Chevreton, M., Giovannini, O., Kepler, S. O., Goode, P. R., Provencal, J. L., Wood, M. A., Clemens, J. C., O'Brien, M. S., Nather, R. E., Winget, D. E., Kleinman, S. J., Kanaan, A., Watson, T. K., Nitta, A., **Montgomery**, **M. H.**, Klumpe, E. W., Bradley, P. A., Sullivan, D. J., Wu, K., Marar, T. M. K., Seetha, S., Ashoka, B. N., Mahra, H. S., Bhat, B. C., Babu, V. C., Leibowitz, E. M., Hemar, S., Ibbetson, P. A., Mashal, E., Meistas, E. G., Dziembowski, W. A., Pamyatnykh, A. A., Moskalik, P., Zola, S., Pajdosz, G., Krzesinski, J., Solheim, J.-E., Bard, S., Massacand, C. M., Breger, M., Gelbmann, M. J., Paunzen, E., & North, P., 1997, MNRAS, 286, 303

"The δ Scuti star FG Virginis. II. A search for high pulsation frequencies.," Breger, M., Handler, G., Serkowitsch, E., Reegen, P., Provencal, J., Wood, M. A., Clemens, J. C., O'Brien, M. S., Winget, D. E., Nather, R. E., Kleinman, S. J., Kanaan, A., Watson, T. K., **Montgomery**, **M. H.**, Bradley, P. A., Sullivan, D. J., Leibowitz, E., Mendelson, H., Krzesinski, J., Pajdosz, G., Moskalik, P., & Solheim, J.-E., 1996, A&A, 309, 197

"Whole earth telescope observations of the DBV white dwarf GD 358," Winget, D. E., Nather, R. E., Clemens, J. C., Provencal, J. L., Kleinman, S. J., Bradley, P. A., Claver, C. F., Dixson, J. S., **Montgomery**, **M. H.**, Hansen, C. J., Hine, B. P., Birch, P., Candy, M., Marar, T. M. K., Seetha, S., Ashoka, B. N., Leibowitz, E. M., O'Donoghue, D., Warner, B., Buckley, D. A. H., Tripe, P., Vauclair, G., Dolez, N., Chevreton, M., Serre, T., Garrido, R., Kepler, S. O., Kanaan, A., Augusteijn, T., Wood, M. A., Bergeron, P., & Grauer, A. D., 1994, ApJ, 430, 839-849

"On tokamak equilibrium," Hazeltine, R. D. & **Montgomery**, **M. H.**, 1988, Journal of Plasma Physics, 40(3), 481-491

Conference Proceedings

"The Wootton center for astrophysical plasma properties: First results for helium," **Montgomery**, **M. H.**, Winget, D. E., Schaeuble, M. A., Dunlap, B. H., & Fuchs, J. T., 2020, In Laboratory Astrophysics: From Observations to Interpretation, ed. F. Salama & H. Linnartz, volume 350, 231-236

"Limits on Mode Coherence Due to a Non-static Convection Zone," **Montgomery**, **M. H.**, Hermes, J. J., & Winget, D. E., 2019, In 21st European Workshop on White Dwarfs, ed. B. G. Castanheira, Z. Vanderbosch, & **M. H. Montgomery**

"Influence of Projection Operator on Oxygen Line Shapes and its effect on Rosseland-Mean Opacity in Stellar Interiors," Gomez, T., Nagayama, T., Kilcrease, D., Hansen, S., **Montgomery, M.**, & Winget, D., 2018, In American Astronomical Society Meeting Abstracts #231, volume 231 of *American Astronomical Society Meeting Abstracts*, #452.02

"Numerical simulation of DA white dwarf surface convection," Zaussinger, F., Kupka, F., **Montgomery**, M., & Egbers, C., 2018, Journal of Physics: Conference Series, 1031(1), 012013

"Helium at White Dwarf Photospheric Conditions: Preliminary Laboratory Results," Schaeuble, M., Falcon, R. E., Gomez, T. A., Winget, D. E., **Montgomery**, **M. H.**, & Bailey, J. E., 2017, In 20th European White Dwarf Workshop, ed. P.-E. Tremblay, B. Gaensicke, & T. Marsh, volume 509 of *Astronomical Society of the Pacific Conference Series*, 231

"From the Telescope to the Laboratory and Back Again: The Center for Astrophysical Plasma Properties," **Montgomery**, **M. H.**, Winget, D., Schaeuble, M., Hawkins, K., & Wheeler, C., 2018, In American Astronomical Society Meeting Abstracts #231, volume 231 of *American Astronomical Society Meeting Abstracts*, #443.01

"A survey of pulsating DA and DB white dwarfs Observations with the Whole Earth Telescope," Provencal, J. L., **Montgomery, M.**, & Shipman, H., 2017, In European Physical Journal Web of Conferences, volume 152 of *European Physical Journal Web of Conferences*, 01012

"Modeling the Spectra of Dense Hydrogen Plasmas: Beyond Occupation Probability," Gomez, T. A., **Montgomery**, **M. H.**, Nagayama, T., Kilcrease, D. P., & Winget, D. E., 2017, In 20th European White Dwarf Workshop, ed. P.-E. Tremblay, B. Gaensicke, & T. Marsh, volume 509 of *Astronomical Society of the Pacific Conference Series*, 143

"The First Six Outbursting Cool DA White Dwarf Pulsators," Bell, K. J., Hermes, J. J., **Montgomery**, **M. H.**, Winget, D. E., Gentile Fusillo, N. P., Raddi, R., & Gänsicke, B. T., 2017, In 20th European White Dwarf Workshop, ed. P.-E. Tremblay, B. Gaensicke, & T. Marsh, volume 509 of *Astronomical Society of the Pacific Conference Series*, 303

"Reaching Higher Densities for Laboratory White Dwarf Photospheres to Measure Spectroscopic Line Profiles," Falcon, R. E., Bailey, J. E., Gomez, T. A., Schaeuble, M., Nagayama, T., **Montgomery**, **M. H.**, Winget, D. E., & Rochau, G. A., 2017, In 20th European White Dwarf Workshop, ed. P.-E. Tremblay, B. Gaensicke, & T. Marsh, volume 509 of *Astronomical Society of the Pacific Conference Series*, 149

"Constraining the physics of carbon crystallization through pulsations of a massive DAV BPM37093," Nitta, A., Kepler, S. O., Chené, A.-N., Koester, D., Provencal, J. L., Kleinmani, S. J., Sullivan, D. J., Chote, P., Sefako, R., Kanaan, A., Romero, A., Corti, M., Kilic, M., **Montgomery**, **M. H.**, & Winget, D. E., 2016, IAU Focus Meeting, 29, 493-496

"An Amplitude Limitation Mechanism for Pulsating White Dwarfs," **Montgomery**, **M. H.**, Romero, A. D.,

& Córsico, A. H., 2015, In 19th European Workshop on White Dwarfs, ed. P. Dufour, P. Bergeron, & G. Fontaine, volume 493 of *Astronomical Society of the Pacific Conference Series*, 181

"Nonlinear Analysis of Pulsating White Dwarf Lightcurves," Provencal, J. L., **Montgomery**, **M. H.**, Shipman, H., & WET TEam, 2015, In 19th European Workshop on White Dwarfs, ed. P. Dufour, P. Bergeron, & G. Fontaine, volume 493 of *Astronomical Society of the Pacific Conference Series*, 187

"Amplitude Variability as Evidence of Crystallization in GD 518 and Other Massive Pulsating White Dwarfs," Hermes, J. J., Kepler, S. O., **Montgomery**, **M. H.**, Gianninas, A., Castanheira, B. G., & Winget, D. E., 2015, In 19th European Workshop on White Dwarfs, ed. P. Dufour, P. Bergeron, & G. Fontaine, volume 493 of *Astronomical Society of the Pacific Conference Series*, 59

"SDSS J1618+3854: The Sixth Extremely Low-Mass White Dwarf Pulsator," Bell, K. J., Kepler, S. O., **Montgomery**, **M. H.**, Hermes, J. J., Harrold, S. T., & Winget, D. E., 2015, In 19th European Workshop on White Dwarfs, ed. P. Dufour, P. Bergeron, & G. Fontaine, volume 493 of *Astronomical Society of the Pacific Conference Series*, 217

"Limits from the Ongoing Search for Planets Around White Dwarf Stars Using Pulsation Timings," Winget, D. E., Hermes, J. J., Mullally, F., Bell, K. J., **Montgomery**, **M. H.**, Williams, S. G., Harrold, S. T., Kepler, S. O., Castanheira, B., Chandler, D. W., Winget, K. I., Mukadam, A. S., & Nather, R. E., 2015, In 19th European Workshop on White Dwarfs, ed. P. Dufour, P. Bergeron, & G. Fontaine, volume 493 of *Astronomical Society of the Pacific Conference Series*, 285

"White Dwarf Pulsations in LSST," Bell, K. J., Claver, C. F., Krughoff, K. S., **Montgomery**, **M. H.**, Mukadam, A. S., & Winget, D. E., 2015, In 19th European Workshop on White Dwarfs, ed. P. Dufour, P. Bergeron, & G. Fontaine, volume 493 of *Astronomical Society of the Pacific Conference Series*, 425

"Which Hydrogen Balmer Lines are Most Reliable for Determining White Dwarf Atmospheric Parameters?," Falcon, R. E., Rochau, G. A., Bailey, J. E., Gomez, T. A., **Montgomery**, **M. H.**, Winget, D. E., & Nagayama, T., 2015, In 19th European Workshop on White Dwarfs, ed. P. Dufour, P. Bergeron, & G. Fontaine, volume 493 of *Astronomical Society of the Pacific Conference Series*, 399

"Deriving the Ages of Field White Dwarfs," von Hippel, T., van Dyk, D., Si, S., **Montgomery, M.**, O'Malley, E., Robinson, E., Stenning, D., Stein, N., Kraczek, E. J., Jefferys, W. H., & Webster, A., 2015, In 19th European Workshop on White Dwarfs, ed. P. Dufour, P. Bergeron, & G. Fontaine, volume 493 of *Astronomical Society of the Pacific Conference Series*, 107

"The Blue Turn in the White Dwarf Stars of Globular Clusters," Campos, F., Bergeron, P., Romero, A. D., Kepler, S. O., Winget, D. E., & **Montgomery**, **M. H.**, 2015, In 19th European Workshop on White Dwarfs, ed. P. Dufour, P. Bergeron, & G. Fontaine, volume 493 of *Astronomical Society of the Pacific Conference Series*, 385

"Deriving Precise Ages of Field White Dwarfs using Bayesian Techniques," Webster, A., Hippel, v., Si, S., van Dyk, D., **Montgomery, M.**, Robinson, E., Stenning, D., Stein, N., Kraczek, E. J., Jefferys, W. H., & O'Malley, E., 2015, In 19th European Workshop on White Dwarfs, ed. P. Dufour, P. Bergeron, & G. Fontaine, volume 493 of *Astronomical Society of the Pacific Conference Series*, 145

"Builders Instead of Consumers: Training Astronomers in Instrumentation & Observation," Tuttle, S., Lee, H., Froning, C., & **Montgomery, M.**, 2014, ArXiv e-prints

"An Overview of Whole Earth Telescope," Provencal, J. L., Shipman, H. L., **Montgomery**, **M. H.**, & WET Team, 2014, Contributions of the Astronomical Observatory Skalnate Pleso, 43, 524

"Decoding Convection with White Dwarf Light Curves," Provencal, J. L., **Montgomery**, **M. H.**, & WET Team, 2013, In Astronomical Society of the Pacific Conference Series, ed. H. Shibahashi & A. E. Lynas-Gray, volume 479 of *Astronomical Society of the Pacific Conference Series*, 257

"Creating White Dwarf Photospheres in the Laboratory: Strategy for Astrophysics Applications," Falcon, R. E., Rochau, G. A., Bailey, J. E., Ellis, J. L., Carlson, A. L., Gomez, T. A., **Montgomery**, **M. H.**, Winget, D. E., Chen, E. Y., Gomez, M. R., Nash, T. J., & Pille, T. M., 2013, In 18th European White Dwarf Workshop., ed. Krzesiń, J. ski, G. Stachowski, P. Moskalik, & K. Bajan, volume 469 of *Astronomical Society of the Pacific Conference Series*, 405

"A Model For Creating Innovators Through Freshman Research," Winget, D. E. & **Montgomery**, **M. H.**, 2013, In American Astronomical Society Meeting Abstracts, volume 221 of *American Astronomical Society Meeting Abstracts*, #115.01

"Several Epochs of Nonlinear Light-curve Fits of G29-38," **Montgomery**, **M. H.** & Kleinman, S. J., 2012, In Progress in Solar/Stellar Physics with Helio- and Asteroseismology, ed. H. Shibahashi, M. Takata, & A. E. Lynas-Gray, volume 462 of *Astronomical Society of the Pacific Conference Series*, 184

"The Z Astrophysical Plasma Properties (ZAPP) Collaboration," **Montgomery**, **M. H.**, Bailey, J. E., Blancard, C., Carlson, A. L., Cohen, D., Cosse, P., Dunham, G., Durmaz, T., Ellis, J. L., Falcon, R. E., Faussurier, G., Gilleron, F., Golovkin, I., Gomez, M. R., Gomez, T., Hall, I., Hansen, S. B., Iglesias, C. A., Kernaghan, M., Lake, P. W., Liedahl, D., Lockard, T., MacArthur, J., MacFarlane, J. J., Mancini, R. C., Nahar, S. N., Nash, T. J., Nielsen, D. S., Pain, J. C., Pinsonneault, M., Pradhan, A. K., Rochau, G. A., Sherrill, M., & Winget, D. E., 2012, In American Astronomical Society Meeting Abstracts #219, volume 219 of *American Astronomical Society Meeting Abstracts*, #238.06

"White Dwarf Stars in the HET Dark Energy Experiment," Castanheira, B., Winget, D., Gebhardt, K., Allende Prieto, C., Shetrone, M., Odewahn, S., & **Montgomery**, **M. H.**, 2012, In American Astronomical Society Meeting Abstracts #219, volume 219 of *American Astronomical Society Meeting Abstracts*, #424.08

"Time-series UV Photometry Of Two Variable Carbon-atmosphere (DQV) White Dwarfs," Williams, K. A., **Montgomery**, **M. H.**, & Winget, D. E., 2012, In American Astronomical Society Meeting Abstracts #219, volume 219 of *American Astronomical Society Meeting Abstracts*, #250.03

"Developing an Experimental Platform to Create White Dwarf Photospheres in the Laboratory," Falcon, R., Rochau, G. A., Bailey, J. E., Ellis, J. L., Carlson, A. L., Gomez, T., **Montgomery**, **M. H.**, Winget, D. E., & Gomez, M. R., 2012, In American Astronomical Society Meeting Abstracts #219, volume 219 of *American Astronomical Society Meeting Abstracts*, #238.07

"A Bayesian Approach to Parameters of Galactic Globular Clusters," Cohen, R., von Hippel, T., Dotter, A., Sarajedini, A., Stein, N., Jeffery, E., **Montgomery**, **M. H.**, & van Dyk, D. A., 2012, In American Astronomical Society Meeting Abstracts #219, volume 219 of *American Astronomical Society Meeting Abstracts*, #152.14

"Creation of White Dwarf Photospheres in the Laboratory," Ellis, J., Falcon, R. E., Rochau, G. A., Winget, D. E., Bailey, J. E., & **Montgomery**, **M. H.**, 2011, In American Astronomical Society Meeting Abstracts, volume 217 of *American Astronomical Society Meeting Abstracts*, 433.24

"EC14012-1446 and WDJ1524-0030: Decoding Convection with White Dwarf Lightcurves," Provencal, J. L., **Montgomery**, **M. H.**, Mulally, S., Dalessio, J., Shipman, H., & Earth Telescope, W., 2011, In American Astronomical Society Meeting Abstracts, volume 217 of *American Astronomical Society Meeting Ab-*

stracts, 341.05

"GD 358: The Case for Oblique Pulsation and Temperature Change," **Montgomery**, **M. H.**, 2010, AIP Conference Proceedings, 1273(1), 530

"Creating White Dwarf Photospheres in the Laboratory," Falcon, R. E., Rochau, G. A., Bailey, J. E., Ellis, J. L., **Montgomery**, **M. H.**, Winget, D. E., Gomez, M. R., & Leeper, R. J., 2010, AIP Conference Proceedings, 1273(1), 436

"Limits of Perturbative Nonlinear Light Curve Analyses: the Case of G117-B15A," **Montgomery**, **M. H.**, Hermes, J. J., & Winget, D. E., 2010, AIP Conference Proceedings, 1273(1), 512

"Exploring the Universe with White Dwarf Stars: The First Year of the Freshman Research Initiative," **Montgomery**, **M. H.**, Winget, D. E., Allen, A., Falcon, R. E., Gomez, J., Ellis, J., Havanur, V., Luecke, K., Melin, K., Miller, G., & Rendon, C., 2010, In New Horizons in Astronomy: Frank N. Bash Symposium 2009, ed. L. M. Stanford, J. D. Green, L. Hao, & Y. Mao, volume 432 of *Astronomical Society of the Pacific Conference Series*, 225

"White Dwarfs in NGC6397 and M4: Constraints on the Physics of Crystallization," Winget, D. E., **Montgomery**, **M. H.**, Kepler, S. O., Campos, F., & Bergeron, P., 2010, AIP Conference Proceedings, 1273(1), 146

"A Gravitational Redshift Determination of the Mean Mass of DBA White Dwarfs," Falcon, R. E., Winget, D. E., **Montgomery**, **M. H.**, & Williams, K. A., 2010, AIP Conference Proceedings, 1273(1), 13

"A Status Report on a Planet Search Around White Dwarf Stars," Hermes, J. J., Mullally, F., Winget, D. E., **Montgomery**, **M. H.**, Miller, G. F., & Ellis, J. L., 2010, AIP Conference Proceedings, 1273(1), 446

"White Dwarf and Pre-White Dwarf Pulsations," **Montgomery**, **M. H.**, 2009, In Stellar Pulsation: Challenges for Theory and Observation: Proceedings of the International Conference, ed. J. A. Guzik & P. A. Bradley, volume 1170. AIP, 605

"Amplitude Limitation in Multi-Periodic Pulsating White Dwarfs," **Montgomery**, **M. H.**, 2008, In Astronomical Society of the Pacific Conference Series, ed. A. Frebel, J. R. Maund, J. Shen, & **M. H.** Siegel, volume 393 of *Astronomical Society of the Pacific Conference Series*, 239

"Observations Of The Variable Carbon-atmosphere White Dwarf SDSS J1426+5752," Williams, K. A., **Montgomery**, **M. H.**, Winget, D. E., Dufour, P., & DeGennaro, S., 2008, In American Astronomical Society Meeting Abstracts, volume 212 of *American Astronomical Society Meeting Abstracts*, #53.03

"Convection: A Seismological Perspective," **Montgomery**, **M. H.**, 2007, In Unsolved Problems in Stellar Physics: A Conference in Honor of Douglas Gough, ed. R. J. Stancliffe, G. Houdek, R. G. Martin, & C. A. Tout, volume 948. AIP, 99

"Using Non-Sinusoidal Light Curves of Multi-Periodic Pulsators to Constrain Convection," **Montgomery**, **M. H.**, 2007, In Astronomical Society of the Pacific Conference Series, ed. A. Napiwotzki & M. R. Burleigh, volume 372 of *Astronomical Society of the Pacific Conference Series*, 635

"The Hottest Known DBV White Dwarf," Sullivan, D. J., Metcalfe, T. S., O'Donoghue, D., Winget, D. E., Kilkenny, D., van Wyk, F., Kanaan, A., Kepler, S. O., Nitta, A., Kawaler, S. D., **Montgomery**, **M. H.**, Nather, R. E., Steeghs, D., Koester, D., Bergeron, P., O'Brien, M. S., Wood, M., Jiang, X. J., Leibowitz, E. M., Ibbetson, P., Zola, S., Krzesinski, J., Pajdosz, G., Vauclair, G., Dolez, N., & Chevreton, M., 2007, In Astronomical Society of the Pacific Conference Series, ed. A. Napiwotzki & M. R. Burleigh, volume 372

of *Astronomical Society of the Pacific Conference Series*, 629

"Untangling Convection and Magnetic Fields in GD358," Provencal, J. L., **Montgomery**, **M. H.**, Kanaan, A., Winget, D. E., Thompson, S., Dalessio, J., Shipman, H. S., Kepler, S. O., & WET Team, 2007, In American Astronomical Society Meeting Abstracts, volume 211 of *American Astronomical Society Meeting Abstracts*, #15.01

"Multi-site Photometry of the Pulsating White Dwarf G38-29," Thompson, S. E., Provencal, J., **Montgomery**, **M. H.**, Shipman, H., Kanaan, A., & WET Collaboration, 2007, In American Astronomical Society Meeting Abstracts, volume 211 of *American Astronomical Society Meeting Abstracts*, #15.10

"Mean ZZ Ceti Pulsation Period Gauges Stellar Temperature," Mukadam, A. S., **Montgomery**, **M. H.**, Kim, A., Winget, D. E., Kepler, S. O., & Clemens, J. C., 2007, In Astronomical Society of the Pacific Conference Series, ed. A. Napiwotzki & M. R. Burleigh, volume 372 of *Astronomical Society of the Pacific Conference Series*, 587

"Preliminary Results from XCOV 25: A New Look at GD 358," Provencal, J. L., Shipman, H. L., **Montgomery**, **M. H.**, Kanaan, A., Bajan, A., & Team, T. W., 2007, In Astronomical Society of the Pacific Conference Series, ed. A. Napiwotzki & M. R. Burleigh, volume 372 of *Astronomical Society of the Pacific Conference Series*, 623

"A New Look at GD358: Using Nonlinear Light Curves to Constrain Convection," Provencal, J. L., Shipman, H., **Montgomery**, **M. H.**, & Whole Earth Telescope Team, 2006, In Bulletin of the American Astronomical Society, volume 38 of *Bulletin of the American Astronomical Society*, 1050

"Mapping Convection Using Pulsating White Dwarf Stars," **Montgomery**, **M. H.**, 2006, In New Horizons in Astronomy: Frank N. Bash Symposium, ed. S. J. Kannappan, S. Redfield, J. E. Kessler-Silacci, M. Landriau, & N. Drory, volume 352 of *Astronomical Society of the Pacific Conference Series*, 261

"Cosmological Implications of a Solid Upper Mass Limit Placed on DFSZ Axions Thanks to Pulsating White Dwarfs," Kim, A., **Montgomery**, **M. H.**, & Winget, D. E., 2006, In New Horizons in Astronomy: Frank N. Bash Symposium, ed. S. J. Kannappan, S. Redfield, J. E. Kessler-Silacci, M. Landriau, & N. Drory, volume 352 of *Astronomical Society of the Pacific Conference Series*, 253

"Ensemble Characteristics of the ZZ Ceti Stars," Mukadam, A. S., **Montgomery**, **M. H.**, Winget, D. E., Kepler, S. O., & Clemens, J. C., 2006, ApJ, 640, 956

"Measuring plasmon neutrino rates using DBVs," Kim, A., Winget, D. E., & **Montgomery**, **M. H.**, 2006, Memorie della Societa Astronomica Italiana, 77, 460

"Driving in ZZ Ceti Stars — Problem Solved?," Kim, A., Winget, D. E., **Montgomery**, **M. H.**, & Kepler, S. O., 2006, Memorie della Societa Astronomica Italiana, 77, 376

"Constraints on Convection from Pulsating White Dwarf Stars," **Montgomery**, **M. H.**, 2006, Memorie della Societa Astronomica Italiana, 77, 464

"Exploring Uncharted Territory in Particle Physics Using Pulsating White Dwarfs: Prospects," Kim, A., Winget, D. E., **Montgomery**, **M. H.**, & Sullivan, D. J., 2005, In ASP Conf. Ser. 334: 14th European Workshop on White Dwarfs, ed. D. Koester & S. Moehler, 489

"Questioning the Purity of the ZZ Ceti Instability Strip," Mukadam, A. S., Winget, D. E., von Hippel, T., **Montgomery**, **M. H.**, Kepler, S. O., & Costa, A. F. M., 2005, In 14th European Workshop on White Dwarfs, ed. D. Koester & S. Moehler, volume 334 of *Astronomical Society of the Pacific Conference Series*, 459

"White Dwarf Lightcurves: Constraining Convection and Mode Identification Using Non-sinusoidal Lightcurves," **Montgomery**, **M. H.**, 2005, In 14th European Workshop on White Dwarfs, ed. D. Koester & S. Moehler, volume 334 of *Astronomical Society of the Pacific Conference Series*, 483

"The Vibrating String Analogy and Mode Trapping," **Montgomery**, **M. H.**, 2005, In 14th European Workshop on White Dwarfs, ed. D. Koester & S. Moehler, volume 334 of *Astronomical Society of the Pacific Conference Series*, 553

"The Crystal Method: Asteroseismology of BPM 37093," Metcalfe, T. S., **Montgomery**, **M. H.**, & Kanaan, A., 2005, In 14th European Workshop on White Dwarfs, ed. D. Koester & S. Moehler, volume 334 of *Astronomical Society of the Pacific Conference Series*, 465

"Exploring Uncharted Territory in Particle Physics Using Pulsating White Dwarfs: Prospects," Kim, A., Winget, D. E., **Montgomery**, **M. H.**, & Sullivan, D. J., 2005, In 14th European Workshop on White Dwarfs, ed. D. Koester & S. Moehler, volume 334 of *Astronomical Society of the Pacific Conference Series*, 489

"The Effects of Crystallization on the Pulsational Properties of Massive ZZ Ceti Stars," Córsico, A. H., Althaus, L. G., **Montgomery**, **M. H.**, & García-Berro, E., 2005, In 14th European Workshop on White Dwarfs, ed. D. Koester & S. Moehler, volume 334 of *Astronomical Society of the Pacific Conference Series*, 537

"Disentangling the core from the envelope in pulsating white dwarf stars," **Montgomery**, **M. H.**, 2003, In NATO ASIB Proc. 105: White Dwarfs, ed. D. de Martino, R. Silvotti, J.-E. Solheim, & R. Kalytis, 247

"Cracking the Diamond: Testing White Dwarf Crystallization Theory with BPM 37093," Metcalfe, T. S., **Montgomery**, **M. H.**, & Kanaan, A., 2003, American Astronomical Society Meeting, 203

"The Core/envelope Symmetry in Pulsating White Dwarf Stars," Metcalfe, T. S., **Montgomery**, **M. H.**, & Winget, D. E., 2003, White Dwarfs: Galactic and Cosmologic Probes, 25th meeting of the IAU, Joint Discussion 5, 16-17 July 2003, Sydney, Australia, 5

"On the Effect of a Starspot on the Modes of Oscillation of a Toy Ap Star Model," **Montgomery**, **M. H.** & Gough, D. O., 2003, In Asteroseismology Across the HR Diagram, ed. M. J. Thompson, M. S. Cunha, & M. J. P. F. G. Monteiro, 545

"^{3}He in Variable DB White Dwarfs?," Koester, D., Wolff, **Montgomery**, **M. H.**, & Winget, D. E., 2003, In NATO ASIB Proc. 105: White Dwarfs, ed. D. de Martino, R. Silvotti, J.-E. Solheim, & R. Kalytis, 267

"Seismic Inversions for White Dwarf Stars," Takata, M. & **Montgomery**, **M. H.**, 2002, In IAU Colloq. 185: Radial and Nonradial Pulsationsn as Probes of Stellar Physics, ed. C. Aerts, T. R. Bedding, & J. Christensen-Dalsgaard, volume 259 of *Astronomical Society of the Pacific Conference Series*, 606

"OpenWD: An Open-Source White Dwarf Code," Metcalfe, T. S., Gonzalez Perez, J. M., Irwin, A. W., Kawaler, S. D., **Montgomery**, **M. H.**, Winget, D. E., & Wood, M. A., 2002, Bulletin of the American Astronomical Society, 34, 1299

"Qualitative Explanation of Phase Shifts Observed in Line Profile Variations," **Montgomery**, **M. H.**, 2002, In IAU Colloq. 185: Radial and Nonradial Pulsationsn as Probes of Stellar Physics, ed. C. Aerts, T. R. Bedding, & J. Christensen-Dalsgaard, volume 259 of *Astronomical Society of the Pacific Conference Series*, 216

"Non-local convection using the Reynolds stress approach; δ Scuti type stars," Kupka, F. & **Montgomery**, **M. H.**, 2001, In Proceedings of the COROT/SWG Milestone 2000 meeting, ed. E. Michel & A. Hui-Bon-

Hoa (Meudon: Observatoire de Paris)

"The Effect of ^{3}He Diffusion on the Pulsational Spectra of DBV Models," **Montgomery**, **M. H.**, Metcalfe, T. S., & Winget, D. E., 2001, In 12th European Workshop on White Dwarfs, ed. J. L. Provencal, H. L. Shipman, J. MacDonald, & S. Goodchild, volume 226 of *Astronomical Society of the Pacific Conference Series*, 330

"Book Review: Delta Scuti and Related Stars: reference handbook and proceedings of the 6th Vienna Workshop in astrophysics (Astronomical Society of the Pacific)," Stickland, D., 2001, The Observatory, 121, 122

"Sixth Vienna Workshop in Astrophysics: Delta Scuti and Related Stars," **Montgomery**, **M. H.** & Breger, M., 2000, PASP, 112, 135

"The Effect of Noise and Finite Sampling on the Line Profile Variations of m=0 Modes," **Montgomery**, **M. H.**, 2000, In IAU Colloq. 176: The Impact of Large-Scale Surveys on Pulsating Star Research, ed. L. Szabados & D. Kurtz, volume 203 of *Astronomical Society of the Pacific Conference Series*, 383

"The Role of Convection in δ Scuti Models," **Montgomery**, **M. H.**, 2000, In Delta Scuti and Related Stars, ed. M. Breger & M. **Montgomery**, volume 210 of *Astronomical Society of the Pacific Conference Series*, 464

"The Effect of ^{3}He Diffusion on the Pulsational Spectra of DBV Models," **Montgomery**, **M. H.** & Winget, D. E., 2000, Baltic Astronomy, 9, 23

"The pulsations of crystallizing white dwarf stars," **Montgomery**, **M. H.** & Winget, D. E., 1999, In 11th European Workshop on White Dwarfs, ed. J.-E. Solheim & E. G. Meistas, volume 169 of *Astronomical Society of the Pacific Conference Series*, 133

"A derivation of the errors for least squares fitting to time series data," **Montgomery**, **M. H.** & Odonoghue, D., 1999, Delta Scuti Star Newsletter, 13, 28

"A Pulsational Study of Crystallized White Dwarf Stars," **Montgomery**, **M. H.** & Winget, D. E., 1998, Baltic Astronomy, 7, 197

"A Pulsational Study of Crystallized White Dwarf Stars," **Montgomery**, **M. H.** & Winget, D. E., 1998, In A Half Century of Stellar Pulsation Interpretation, ed. P. A. Bradley & J. A. Guzik, volume 135 of *Astronomical Society of the Pacific Conference Series*, 449

"BPM 37093: Preliminary Results from XCOV 16 and XCOV 17," Kanaan, A., Nitta-Kleinman, A., Winget, D. E., Kepler, S. O., **Montgomery**, **M. H.**, & WET team, 2000, Baltic Astronomy, 9, 87

"Mode Identification of BPM 37093 with the HST," Nitta, A., Kanaan, A., Kepler, S. O., Koester, D., **Montgomery**, **M. H.**, & Winget, D. E., 2000, Baltic Astronomy, 9, 97

"WET Observations and Smoothed Particle Simulations of DQ Herculis," Wood, M. A., Simpson, J. C., Kawaler, S. D., O'Brien, M. S., Nather, R. E., Metcalfe, T. S., Winget, D. E., **Montgomery**, **M. H.**, Jiang, X. J., Leibowitz, E. M., Ibbetson, P., O'Donoghue, D., Krzesinski, J., Pajdosz, G., Zola, S., Vauclair, G., Dolez, N., & Chevreton, M., 2000, Baltic Astronomy, 9, 211

"Observational Proof of the ZZ Ceti Red Edge," Kanaan, A., Winget, D. E., Kepler, S. O., & **Montgomery**, **M. H.**, 2000, In IAU Colloq. 176: The Impact of Large-Scale Surveys on Pulsating Star Research, ed. L. Szabados & D. Kurtz, volume 203 of *Astronomical Society of the Pacific Conference Series*, 518

"Search For Cool White Dwarf Pulsators," Nitta, A., Mukadam, A., Winget, D. E., Kanaan, A., Kleinman,

S. J., Kepler, S. O., & **Montgomery**, **M. H.**, 2000, In IAU Colloq. 176: The Impact of Large-Scale Surveys on Pulsating Star Research, ed. L. Szabados & D. Kurtz, volume 203 of *Astronomical Society of the Pacific Conference Series*, 525

"BPM 37093: the Way to the Interior of Crystallized Stars," Kanaan, A., Kepler, S. O., Giovannini, O., Winget, D. E., **Montgomery**, **M. H.**, & Nitta, A., 1998, Baltic Astronomy, 7, 183

"The variable "hybrid" PG 1159 star HS 2324+3944," Handler, G., Kanaan, A., & **Montgomery**, **M. H.**, 1997, In Planetary Nebulae, ed. H. J. Habing & H. J. G. L. M. Lamers, volume 180 of *IAU Symposium*, 110

"The Delta Scuti star FG Vir. II. A search for high pulsation frequencies," Breger, M., Handler, G., Serkowitsch, E., Reegen, P., Provencal, J., Wood, M. A., Clemens, J. C., O'Brien, M. S., Winget, D. E., Nather, R. E., Kleinman, S. J., Kanaan, A., Watson, T. K., **Montgomery**, **M. H.**, Bradley, P. A., Sullivan, D. J., Leibowitz, E., Mendelson, H., Krzesinski, J., Pajdosz, G., Moskalik, P., & Solheim, J.-E., 1995, Delta Scuti Star Newsletter, 9, 3

Papers for a Broader Audience

"ASTRONOMY: Shooting for the Stars," **Montgomery**, **M. H.**, 2011, Science, 332(6026), 180

"ASTRONOMY: The Pulse of Distant Stars," **Montgomery**, **M. H.**, 2008, Science, 322(5901), 536

"AstroPrimer: 'Thousands of Tiny Hammers' Drive the Sun's Beat," **Montgomery**, **M. H.**, 2007, StarDate Magazine, September/October, 15

"Dead—But Not Duds," Yeager, A., 2008, Science News, 174(8), 26

Theses

"The Evolution and Pulsation of Crystallizing White Dwarf Stars," **Montgomery**, **M. H.**, 1998, PhD thesis, The University of Texas at Austin

"The Frequency Spectra of Weakly Magnetic White Dwarf Stars," **Montgomery**, **M. H.**, 1994, Masters thesis, The University of Texas at Austin

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