

Publications and Reviewing

First author, refereed publications:

- [Finding binaries among Kepler pulsating stars from phase modulation of their pulsations](#), **S. J. Murphy**, T. R. Bedding, H. Shibahashi, D. W. Kurtz and H. Kjeldsen (2014), MNRAS 441, 2515
- [Frequency analysis of the high-amplitude SX Phe star KIC 11754974](#), **S. J. Murphy**, A. Pigulski, D.W. Kurtz, J.C. Suarez, A. Grigahcène, L.A. Balona, B. Smalley, K. Uytterhoeven, R. Szabo, A.O. Thygesen, V. Elkin, M. Breger, G. Handler, J. Guzik, J.M. Nemec and J. Southworth, (2013b), MNRAS, 432, 2884
- [Super-Nyquist asteroseismology with the Kepler Space Telescope](#), **S. J. Murphy**, H. Shibahashi, D. W. Kurtz, (2013a), MNRAS, 430, 2986
- [Kepler Fourier concepts: The performance of the Kepler data pipeline](#), **S. J. Murphy** (2012b), AN, 333, 1057
- [Pulsational amplitude growth of KIC 3420637 \(HD 178875\) in the context of Am and rho Puppis stars](#), **S. J. Murphy**, A. Grigahcène, E. Niemczura, D. W. Kurtz, K. Uytterhoeven, (2012a), MNRAS 427, 1418
- [Characteristics of Kepler short- and long-cadence data](#), **S. J. Murphy** (2012a), MNRAS 422, 665

As co-author:

- [Asteroseismic measurement of surface-to-core rotation in a main sequence A star, KIC11145123](#), D.W. Kurtz, H. Saio, M. Takata, H. Shibahashi, **S.J. Murphy**, T. Sekii, 2014, arXiv 1405.0155
- [The Kepler characterization of the variability among A- and F-type stars. I. General overview](#), K. Uytterhoeven, A. Moya, A. Grigahcène, J. A. Guzik, J. Gutiérrez-Soto, B. Smalley, G. Handler, L. A. Balona, E. Niemczura, L. Fox Machado, S. Benatti, E. Chapellier, A. Tkachenko, R. Szabó, J. C. Suárez, V. Ripepi, J. Pascual, P. Mathias, S. Martín-Ruiz, H. Lehmann, J. Jackiewicz, S. Hekker, M. Gruberbauer, R. A. García, X. Dumusque, D. Díaz-Fraile, P. Bradley, V. Antoci, M. Roth, B. Leroy, **S. J. Murphy**, P. De Cat, J. Cuypers, H. Kjeldsen, J. Christensen-Dalsgaard, M. Breger, A. Pigulski, L. L. Kiss, M. Still, S. E. Thompson, and J. Van Cleve, 2011, A&A, 534, 125
- [Unusual high-frequency oscillations in the Kepler delta Scuti star KIC 4840675](#), L. A. Balona, M. Breger, G. Catanzaro, M. S. Cunha, G. Handler, Z. Kołaczowski, D. W. Kurtz, **S. J. Murphy**, E. Niemczura, M. Paparo, B. Smalley, R. Szabo, K. Uytterhoeven, J. L. Christiansen, K. Uddin and M. C. Stumpe, 2012, MNRAS, 424, 1187

Reviewing: External examiner for one thesis. Reviewer for MNRAS, ApJ, PASA, IBVS, and Geoplanet: Earth & Planetary Sciences. Former organiser of UCLan's stellar astrophysics meetings (journal club).

Conferences and presentations

- Contributed talk at CoRoT-3/KASC-7, Toulouse, France: "[Finding Binaries Among Pulsating Stars](#)", July 2014.
- "Visiting Astronomer" outreach talks (total 4x 1 hr) at Bourne Grammar School, Lincs, UK, July 2014.
- Seminar at UCLan, Preston, UK: "[Finding Binaries Among Pulsating Stars](#)", June 2014.
- Attended Aarhus Spectroscopy Workshop, Aarhus, Denmark, May 2014. All travel, accommodation and subsistence externally funded (cf. seminar, below).
- Seminar at Aarhus University, Denmark: "[Finding Binaries Among Pulsating Stars](#)", May 2014.
- SkyMapper Workshop, Australia National University, Canberra, Australia, April 2014.
- Invited Seminar at Australia National University, Canberra, Australia: "[Beyond Transits \(the cool stuff you can do with Kepler data\)](#)", March 2014.
- Sydney Institute for Astronomy seminar, "[The Intriguing A stars](#)", October 2013.
- **Invited review** at the KASC 6 conference, Sydney "[Main sequence A-F pulsators](#)", June 2013. Externally (RAS) funded to sum of £1250.
- Public talk at the Society for Popular Astronomy 60th Anniversary Meeting "[Planets and Pulsations](#)", May 2013.
- Invited Seminar at (1) University of Birmingham, UK; (2) University of Wroclaw, Poland; (3) Polish Academy of Sciences, Poland. "[Investigating the Intriguing A-type stars](#)", Feb/Apr/Apr 2013.
- Invited Seminar at University of Porto, Portugal. "[Pulsating A-type stars seen with Kepler](#)", November 2012. Part of an externally funded, 3-month research visit.

- 10th NEON Observing School, Asiago, Italy. Group oral presentation on [symbiotic stars](#), Sept 2012.
- UCLan graduate research conference 2012, Preston, UK. Contributed talk in "experienced presenter" category: "[Highlights of research with the Kepler space telescope](#)" (runner up prize), July 2012.
- KASC 5, Balaton, Hungary. Contributed talk "[KIC 3429637 and the problem of pulsating Am stars](#)", June 2012.
- The Modern Era of Helio- and Asteroseismology, Obergurgl, Austria. Contributed talk "[Kepler Fourier Concepts](#)" (extended) + conference proceedings (see Publications), May 2012.
- National Astronomy Meeting, Manchester, UK. Poster "[Are the constant stars in the delta Scuti instability strip chemically peculiar?](#)" (An update), March 2012.
- Exoplanets and their host stars, Oxford, UK. Contributed talk: "[Kepler Fourier concepts](#)"; solo oral presentation of group work: "[Stellar population synthesis](#)", March 2012.
- First Kepler Science Conference, NASA Ames, California, USA. Poster "[Are the constant stars in the delta Scuti instability strip chemically peculiar?](#)", Dec 2011.
- KASC 4, Boulder, Colorado, USA. Contributed talk "[A highly non-linear delta Scuti star](#)", July 2011.
- UCLan graduate research conference 2011, Preston, UK. Poster + 5-min oral contribution "[A highly non-linear delta Scuti star](#)" (first place prize), May 2011
- IAC winter school in asteroseismology, Tenerife, Spain, Nov 2010.