

## Author Index

- Aigrain, S. – 105, 364  
Alcock, C. – 344  
Anderson, D. – 99  
Anderson, R. I. – 275  
Andruk, V. – 389  
Ansari, R. – 376  
Antonio de Diego Onsurbe, J. – 312  
Arcavi, I. – 431  
  
Badenes, C. – 289  
Baltay, C. – 324  
Baptista, R. – 227, 278  
Baraffe, I. – 138  
Barbieri, C. – 280, 296  
Barclay, T. – 283, 434, 442  
Barria, D. – 404  
Bartczak, P. – 394  
Barthelmy, S. D. – 41  
Bastieri, D. – 294  
Bayo, A. – 404  
Beaulieu, J. P. – 309  
Beck, M. – 309  
Bedding, T. R. – 17  
Beers, T. – 289  
Belanger, G. – 431  
Beletsky, Y. – 404  
Ben-Ami, S. – 437  
Benkő, J. M. – 286  
Bentz, M. C. – 215, 227  
Beshore, E. – 306  
Bewsher, D. – 451  
Bianco, F. B. – 408  
Bickerton, S. – 289  
Bignall, H. E. – 129, 347  
Bildsten, L. – 71, 269  
Bilous, A. V. – 436  
Blomme, J. – 309  
Bloom, J. S. – 72, 165, 438  
Blum, R. – 361  
Bode, M. F. – 91, 235  
Boffin, H. M. J. – 404  
Bond, H. E. – 215  
Bonning, E. W. – 109  
Borges, B. – 278  
Borra, E. – 394  
Bower, G. C. – 450  
Bramich, D. – 408  
Brammer, G. – 404  
Brewster, S. – 133  
Brickhouse, N. – 133  
Brisken, W. F. – 423  
  
Brown, T. – 408  
Browne, P. – 408, 435  
Buckley, D. – 99  
Buffington, A. – 91  
Bumble, B. – 385  
Butler, N. R. – 438  
Byun, Y.-I. – 291, 344  
  
Candey, R. M. – 133  
Cannizzo, J. K. – 41  
Carraro, G. – 404  
Cassan, A. – 435  
Catalan, M. – 306  
Centrella, J. – 191  
Cenko, S. B. – 72  
Cepa, J. – 312  
Chadwick, P. M. – 440  
Chandrasekharan, S. – 443  
Chang, S.-W. – 291  
Charles, P. A. – 23  
Chelouche, D. – 432  
Chen, Y. – 355  
Chernenko, A. – 432  
Christensen, E. – 306  
Ciprini, S. – 121, 294, 437  
Clarke, N. – 158  
Clayton, G. C. – 125, 215  
Clover, J. M. – 91  
Cole, R. – 372  
Colegate, T. – 158  
Coles, B. – 442  
Collins, S. – 280, 296  
Copperwheat, C. – 433  
Cordes, J. M. – 49  
Croft, S. – 272  
Cross, N. J. G. – 185  
Cutri, R. – 334  
Cuypers, J. – 299, 309  
  
D'Addario, L. – 340  
Daniel, M. – 440  
Darnley, M. J. – 91  
Davenport, J. – 433  
de Budè, D. – 301  
Debosscher, J. – 177  
de Búrca, D. – 303  
Degroote, P. – 177  
Delchambre, L. – 394  
Deller, A. T. – 423  
De Ridder, J. – 309

- de Wit, W.-J. – 404  
 Dhillon, V. – 433  
 Diaz-Merced, W. L. – 133  
 Dilday, B. – 408  
 Djorgovski, S. G. – 141, 185, 306, 318, 355  
 Dominik, M. – 408  
 Donalek, C. – 141, 306, 355  
 Drake, A. J. – 141, 306, 318, 355  
 Dubath, P. – 153, 309
- Ederoclite, A. – 312  
 Ellman, N. – 324  
 Escande, L. – 437  
 Evans, D. W. – 153  
 Eyer, L. – 153, 275, 309
- Falcke, H. – 411, 450  
 Farrar, G. R. – 261  
 Fender, R. – 11, 451  
 Fernandez, M. – 448  
 Finet, F. – 394  
 Fotopoulos, N. – 446  
 Fowler, J. – 334  
 Frail, D. A. – 72  
 Fulton, B. J. – 408
- Gaensler, B. – 272, 434  
 Gal-Yam, A. – 452  
 Gao, J. J. – 442  
 Garrido, R. – 392  
 Gasparini, D. – 294  
 Gehrels, N. – 41  
 Gil-Merino, R. – 406  
 Girard, J. – 404  
 Goicoechea, L. J. – 315, 406  
 González-Serrano, I. – 312  
 Gradari, S. – 280, 296  
 Graham, M. J. – 141, 221, 306, 318, 355, 408  
 Griffin, R. E. M. – 239, 243  
 Griffin, R. F. – 75  
 Griffin, S. C. – 321  
 Grindlay, J. E. – 29, 243, 447  
 Gulbis, A. – 99  
 Gutierrez-Soto, J. – 392  
 Guy, L. – 309
- Habibi, F. – 376  
 Habraken, S. – 394  
 Hadjiyska, E. – 324  
 Haggard, D. – 199  
 Hakala, P. – 434
- Hall, P. – 158  
 Hancock, P. – 434  
 Harman, D. J. – 91  
 Hartigan, P. – 327  
 Hau, G. – 404  
 Hawley, S. L. – 434  
 Hayama, K. – 331  
 Heinke, C. O. – 337  
 Henden, A. A. – 95, 255  
 Hessels, J. W. T. – 104  
 Hettinger, T. – 289  
 Hick, P. P. – 91  
 Hickson, P. – 394  
 Hilton, E. J. – 434  
 Hinderer, T. – 449  
 Ho, W. C. G. – 337  
 Hodgkin, S. – 153, 425  
 Hodgson, J. A. – 129  
 Hoffman, D. – 334  
 Hook, I. – 63  
 Horne, K. – 138, 207, 227, 408, 435  
 Horowitz, B. – 324  
 Hounsell, R. A. – 91  
 Howell, D. A. – 408  
 Huang, S. – 289  
 Hyman, S. – 435
- Ivanov, V. – 404
- Jackson, B. V. – 91  
 Jaeger, T. – 435  
 Jan, A. – 309  
 Jannuzzi, B. – 361  
 Jauncey, D. L. – 347  
 Jenet, F. A. – 67  
 Johns-Krull, C. M. – 327  
 Jones, D. – 435  
 Jones, D. L. – 340
- Kains, N. – 408, 435  
 Karpov, S. – 436  
 Kasliwal, M. M. – 62, 269  
 Kassim, N. E. – 67, 435  
 Kataria, D. – 372  
 Kazantseva, L. – 389  
 Keane, E. F. – 342  
 Keating, K. – 67  
 Kedziora-Chudczer, L. – 347  
 Kelley, L. Z. – 358  
 Kennedy, T. – 372  
 Kerschbaum, F. – 111  
 Khardon, R. – 344  
 Kim, D.-W. – 291, 344  
 King, O. G. – 436

- Kjeldsen, H. – 17  
Koay, J. Y. – 347  
Koerding, E. – 450  
Kolenberg, K. – 133  
Kondratiev, V. I. – 436  
Konidaris, N. – 437  
Kotze, M. M. – 23, 99  
Kowalski, A. F. – 434  
Kramer, M. – 147, 342  
Kulkarni, S. R. – 55, 72, 437
- Kurtz, D. – 105  
Larson, S. – 306  
Larsson, S. – 437  
Lauer, T. – 361  
Law, N. – 408  
Lazio, J. – 67, 340, 435  
Lecoeur, I. – 309  
Lesquoy, É. – 309  
Levan, A. J. – 349  
Levitán, D. – 437  
Lister, T. A. – 352, 408  
Littlefair, S. – 433  
Lo, K. – 397  
Lodato, G. – 438  
Loredo, T. J. – 87  
López, M. – 309  
Los, E. – 29, 447  
Lott, B. – 437  
Lovell, J. E. J. – 347  
Lyne, A. G. – 342
- Macquart, J.-P. R. – 158, 347, 414  
Madejski, G. – 437  
Mahabal, A. A. – 141, 306, 318, 355  
Majid, W. A. – 340, 423  
Manchanda, R. K. – 438  
Mandel, I. – 358  
Mannone, J. C. – 133  
Marquette, J. B. – 309  
Marsh, T. – 433  
Masci, F. – 334  
Matheson, T. – 361  
Mattmann, C. – 340  
Mazin, B. – 385  
McDonald, J. – 303  
McHugh, S. – 385  
McKinnon, R. – 324  
McPhate, J. – 99  
McQuillan, A. – 364  
Meeker, S. – 385  
Mickaelian, A. M. – 366  
Mignani, R. P. – 369, 372, 379  
Miller, A. A. – 438
- Miller, L. R. – 324  
Moerchen, M. – 404  
Moghaddam, B. – 355  
Momany, Y. – 404  
Moniez, M. – 207, 376  
Moran, P. – 379  
Moriya, T. – 439  
Morokuma, T. – 439  
Mowlavi, N. – 153, 275, 309  
Mundell, C. – 270  
Murphy, T. – 221, 397, 434, 455
- Ruiz, S. Martín – 392  
Naito, J. – 445  
Naletto, G. – 280, 296  
Navarro, R. – 340  
Nienartowicz, K. – 309  
Niiuma, K. – 331  
Nissanke, S. – 191  
Norman, D. – 361  
Norton, A. J. – 382, 451  
Nowotny, W. – 111  
Nuernberger, D. – 404  
Nugent, P. – 324, 440
- O'Brien, K. – 385  
O'Connor, P. – 303  
Ojha, R. – 347  
Oliveira, A. – 278  
Olsen, K. – 361  
Ordóñez-Blanco, D. – 309  
Osten, R. A. – 137, 435  
Oyama, T. – 331
- Pakuliak, L. – 389  
Paparó, M. – 286  
Parent, J. – 408  
Pascual-Granado, J. – 392  
Patnaude, D. J. – 337  
Pekeur, N. – 440  
Petr-Gotzens, M. G. – 448  
Piro, T. – 449  
Plavchan, P. – 440  
Poels, J. – 394  
Polednikova, J. – 312  
Potter, S. B. – 99, 117, 440  
Predoi, V. – 441  
Preston, R. – 340  
Pretorius, M. – 404  
Price, L. – 441  
Prieto, J. L. – 306  
Primas, F. – 35  
Protopapas, P. – 271, 344  
Pursimo, T. – 347

- Quartaert, E. – 444  
 Quimby, R. – 437
- Rabinowitz, D. – 324  
 Rahvar, S. – 376  
 Rajoelimanana, A. – 23  
 Ramirez-Ruiz, E. – 358  
 Ramsay, G. – 434, 442  
 Read, J. – 449  
 Rebbapragada, U. – 340, 397  
 Reed, C. – 397, 442  
 Rest, A. – 72, 215  
 Reynolds, C. – 347  
 Rickett, B. J. – 347, 442  
 Ridgway, S. – 361, 443  
 Rimoldini, L. – 309, 443  
 Rivinius, T. – 404  
 Roberts, S. – 364  
 Roming, P. – 443  
 Rossi, E. M. – 444  
 Rots, A. H. – 400, 402  
 Rowan-Robinson, M. – 344  
 Rucinski, S. – 239
- Saesen, S. – 153  
 Sagar, R. – 394  
 Saha, A. – 361  
 Sanchez-Janssen, R. – 404  
 Sand, D. – 408  
 Sarkissian, A. – 366  
 Sarro, L. M. – 309  
 Schade, D. – 249  
 Schellart, P. – 411  
 Schmidt, B. – 9  
 Schmidtobreick, L. – 404  
 Schneps, M. – 133  
 Schwab, J. – 444  
 Schwarzenberg-Czerny, A. – 81  
 Scowcroft, V. – 444  
 Scowen, P. – 327  
 Seaman, R. – 221, 318  
 Selman, F. – 404  
 Servillat, M. – 29, 447  
 Shafter, A. W. – 91  
 Shalyapin, V. N. – 315, 406  
 Shaw, R. – 361  
 Shearer, A. – 280, 296, 303, 379  
 Shen, K. – 444  
 Shibahashi, H. – 445  
 Shin, M.-S. – 445  
 Shporer, A. – 408  
 Shternin, P. S. – 337  
 Siegmund, O. H. W. – 99  
 Siemion, A. – 446  
 Sinamyan, P. K. – 366
- Singer, L. – 446  
 Sivakoff, G. R. – 199, 446  
 Smartt, S. – 71  
 Smith, A. – 372  
 Smith, P. – 372  
 Snodgrass, C. – 408  
 Stappers, B. W. – 103, 296, 342  
 Starling, R. – 183  
 Steeghs, D. – 227, 433  
 Steele, I. A. – 408, 447  
 Stefl, S. – 404  
 Stinebring, D. – 442  
 Street, R. A. – 207, 408  
 Sullivan, M. – 270  
 Surdej, J. – 394  
 Süveges, M. – 309  
 Swings, J.-P. – 394  
 Szabó, R. – 286
- Tang, S. – 29, 447  
 ter Veen, S. – 411  
 Terron, V. – 448  
 Thompson, D. R. – 340, 397, 423  
 Tingay, S. J. – 414, 423  
 Tisserand, P. – 309  
 Tominaga, N. – 448  
 Trichas, M. – 344  
 Trott, C. M. – 414  
 Tsang, D. – 449  
 Tsapras, Y. – 408  
 Tsvetkov, M. – 417  
 Tsvetkova, K. – 417  
 Turmon, M. – 355  
 Turner, D. G. – 449
- Vallerga, J. – 99  
 Van Velzen, S. – 450  
 Verroi, E. – 280, 296  
 Vestrand, W. T. – 235  
 Viallet, M. – 138  
 Virun, N. – 389
- Wagstaff, K. L. – 340, 397, 423  
 Walder, R. – 138  
 Walker, A. – 361  
 Walker, E. N. – 420  
 Walker, M. – 137  
 Walkowicz, L. M. – 158  
 Wallace, P. – 450  
 Walton, D. – 372  
 Warner, B. – 3, 301  
 Wayth, R. B. – 414, 423  
 Welsh, B. – 99  
 Werthimer, D. – 446

- White, G. J. – 451  
 White, N. E. – 159  
 Williams, P. K. G. – 450  
 Williams, R. – 141, 191, 221, 306, 318,  
     355  
 Winter, B. – 372  
 Woudt, P. – 301, 451  
 Wraight, K. T. – 451  
 Wyrzykowski, L. – 153, 207, 425  
 Wyse, R. F. G. – 171  
 Yakovlev, D. G. – 337  
 Yaron, O. – 452  
 Yegorova, I. – 404  
 Zampieri, L. – 280, 296  
 Zane, S. – 372  
 Zauderer, B. A. – 453  
 Zinn, R. – 324

# International Journal of Astrobiology

**Managing Editor**

Simon Mitton, University of Cambridge , UK

*International Journal of Astrobiology* is the peer-reviewed forum for practitioners in this exciting interdisciplinary field. Coverage includes cosmic prebiotic chemistry, planetary evolution, the search for planetary systems and habitable zones, extremophile biology and experimental simulation of extraterrestrial environments, Mars as an abode of life, life detection in our solar system and beyond, the search for extraterrestrial intelligence, the history of the science of astrobiology, as well as societal and educational aspects of astrobiology. Occasionally an issue of the journal is devoted to the keynote plenary research papers from an international meeting. A notable feature of the journal is the global distribution of its authors.

---

**Price information**

is available at: <http://journals.cambridge.org/ija>

**Free email alerts**

Keep up-to-date with new material – sign up at  
<http://journals.cambridge.org/ija-alerts>



**International Journal of  
Astrobiology**  
is available online at:  
<http://journals.cambridge.org/ija>

**To subscribe contact  
Customer Services****in Cambridge:**

Phone +44 (0)1223 326070  
Fax +44 (0)1223 325150  
Email [journals@cambridge.org](mailto:journals@cambridge.org)

**in New York:**

Phone +1 (845) 353 7500  
Fax +1 (845) 353 4141  
Email  
[subscriptions\\_newyork@cambridge.org](mailto:subscriptions_newyork@cambridge.org)

For free online content visit:  
<http://journals.cambridge.org/ija>



**CAMBRIDGE**  
UNIVERSITY PRESS

# Go Mobile

CJO Mobile (CJOM) is a streamlined  
Cambridge Journals Online (CJO)  
for smartphones and other  
small mobile devices



- Use CJOM to access all journal content including *FirstView* articles which are published online ahead of print
- Access quickly and easily thanks to simplified design and low resolution images
- Register for content alerts or save searches and articles – they will be available on both CJO and CJOM
- Your device will be detected and automatically directed to CJOM via: [journals.cambridge.org](http://journals.cambridge.org)



CAMBRIDGE  
UNIVERSITY PRESS

CAMBRIDGE

JOURNALS

# Knowledge is no longer shelved

The *Cambridge Journals Digital Archive* contains more than 160 journals, more than 3 million pages and more than 8 million linked references. Knowledge is now more visible and more searchable than ever.



[journals.cambridge.org/archives](https://journals.cambridge.org/archives)



CAMBRIDGE  
UNIVERSITY PRESS









## IAU Symposium No. 285

19–23 September 2011  
Oxford, United Kingdom

# New Horizons in Time-Domain Astronomy

IAU Symposium 285 addresses studies of variability among the whole gamut of cosmic objects. While new fields involving transients, blazars, gamma-ray bursts, active galactic nuclei and quasars are still emerging, the puzzles posed by longer-term sources of variability still remain. This volume adopts an interdisciplinary theme, examining different manifestations of variability to gain new scientific insights that may be missed when one type of object or variability is studied in isolation. By integrating discussions from participants across the breadth of astronomical science, it addresses the core question: 'How can technology and collaboration be better harnessed to enhance the science requirements and outcomes?' With major new transient surveys coming online soon to lay the groundwork for LSST, the results, research tools and visions presented here will help both researchers and database managers collaborate in the exciting challenges of time-domain astronomy.

Proceedings of the International Astronomical Union

*Editor in Chief: Prof. Thierry Montmerle*

This series contains the proceedings of major scientific meetings held by the International Astronomical Union. Each volume contains a series of articles on a topic of current interest in astronomy, giving a timely overview of research in the field. With contributions by leading scientists, these books are at a level suitable for research astronomers and graduate students.

International Astronomical Union



MIX  
Paper from  
responsible sources  
FSC® C018127

Proceedings of the International Astronomical Union

**Cambridge Journals Online**

For further information about this journal please  
go to the journal website at:  
[journals.cambridge.org/iau](http://journals.cambridge.org/iau)

**CAMBRIDGE**  
UNIVERSITY PRESS

ISBN 978-1-107-01985-0



9 781107 019850 >