Dr. Steve Croft

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PERSONAL DETAILS

Citizenships: USA and UK dual national
Professional Memberships: Fellow of the Royal Astronomical Society, Member of the American Astronomical Society, Member of the International Astronomical Union, Member of the Astronomical Society of the Pacific

EDUCATION

1998 - 2002 **Oxford University, UK: DPhil (PhD) Astrophysics**
Galaxy clustering at high redshift from radio surveys. Advisor: Steve Rawlings

1994 - 1998 **University College London (London University), UK: MSci Astrophysics**
MSci project: Magnetism and Accretion in AM Herculis
Degree class: First class honours

1987 - 1994 **Calday Grange Grammar School, UK**
(1994) A-level: Physics: A, Mathematics: A, Further Mathematics: B, Geography: A, General Studies: A, Music: C (best A-level results in school)
(1993) AO: German for Business Studies: A
(1992) GCSE: 10 Grade A, 1 Grade B (best GCSE results in school)
(1991) GCSE: Mathematics: A

EMPLOYMENT

2014 - **Associate Project Astronomer, University of California, Berkeley / Scientist VI, Eureka Scientific**
Co-PI on $232k grant to study supermassive black hole growth and transient radio sources with the Murchison Widefield Array, with David Kaplan, UW-Milwaukee (PI). Leading the outreach, education, and public data program, in addition to proposal writing and scientific data analysis, for UC Berkeley SETI Research Center and for the Breakthrough Listen project.

2012 - 2013 **Researcher, University of Wisconsin, Milwaukee (with David Kaplan) - based at UCB**
Very Large Array transient searches.

2011 - 2014 **Assistant Project Astronomer, University of California, Berkeley (with Geoff Bower / Carl Heiles)**
Surveys with the Allen Telescope Array. Key member of proposal and implementation team for $800k in NASA education projects.

2007 - 2011 **Associate Specialist, University of California, Berkeley (with Geoff Bower)**
Surveys with the Allen Telescope Array. X-ray observations of radio transients. $25k grant to collaborate with Lawrence Livermore National Lab (LLNL) on time-domain sky surveys. Principal Investigator on $133k Spitzer Space Telescope project: The Most Extreme Starbursts in the Local Universe.

2007 **Postdoctoral Researcher, University of California, Davis (with Bob Becker) - based at LLNL**
Radio galaxies in galaxy cluster environments.

2005 - 2007 **Postdoctoral Researcher, University of California, Merced (with Wil van Breugel) - based at LLNL**
P.I. on $50k Spitzer project: Studying the Populations of Radio Sources in the Bootes Deep Field. Co-I on Spitzer project: IRAC imaging of high-z, low-luminosity radio galaxies in NDWFS and FLS.

2002 - 2005 **Postdoctoral Researcher, Lawrence Livermore National Laboratory (with Wil van Breugel)**
Radio galaxies, their environments, evolution, clustering, and triggering. Jet-induced star-formation. Galaxy clusters and proto-clusters.

TEACHING AND RESEARCH SUPERVISION

2015 - **Undergraduate research program coordinator**
Creation of, and strategy and management for, the undergraduate research program at Berkeley SETI Research Center. Coordinating the activities of approximately 10 undergraduates at a time, working on a range of research projects.

2015 - 2017 **Undergraduate project advisor**
Advising two UC Berkeley undergraduates working with me on analysis of survey data from the Murchison Widefield Array.

2012 - 2013 **Undergraduate project advisor**
Advising a UC Berkeley undergraduate working with me on analysis of Kepler lightcurves of active galactic nuclei.

2007 - 2010 **Co-advisor for UC Riverside PhD Student**
Data from the Spitzer project I led formed the major part of the thesis of a student whom I co-advised.

2000 - 2002 **Part-time A-level Physics and Math Instructor, Greene's Tutorial College, Oxford**
Extensive part-time teaching experience, including full responsibility for entire A-level Physics course for three students.

2000 - 2002 **Graduate Student Instructor, Oxford University Astrophysics**
Introductory Astronomy.

1996 **Part-time Physics and Math Tutor**
Teaching physics and math to GCSE and A-level students.

PUBLIC OUTREACH

2015 - Outreach, education, and public data lead, Berkeley SETI Research Center (http://facebook.com/BerkeleySETI) and Breakthrough Listen (http://seti.berkeley.edu/listen)
2017 Invited keynote address to 20 high school heads, Northern EdTech Conference, Leeds University, UK
2017 Invited panelist, Corpus Christi College, Oxford 500th Anniversary Science Symposium
2016 Invited keynote address to 25 high school heads, Malone Scholars conference, Stanford University
2015 Designed 11 new lessons for the Big History Project (http://bit.do/bhp_astro)
2013 - Science@Cal Advisory Board
2010 - Lead monthly Science@Cal lecture series (http://scienceatcal.berkeley.edu/lectures)
2012 - 2015 Co-lead, $130k "EVOLVE" E/PO grant; delivering web resources for teachers on astronomy and evolution (http://bit.do/place_for_life)
2012 - 2015 Co-lead, $670k "ASPIRE" E/PO grant; delivering weekly workshops combining art and science, focusing on underrepresented minority interest in astronomy (http://nasanovas.org)
2012 Collaborated with UK school on high altitude balloon project (http://bbc.in/Q065ZK)
2012 Worked with San Francisco Arts Commission on "Vast and Undetectable" exhibit
2011, 2012 Planning committee for two Bay Area Science Festivals (http://scienceatcal.berkeley.edu/festival)
2010 - 2011 Volunteer for ASP Project ASTRO (visiting inner-city special needs classroom)
2009 Led International Year of Astronomy activities at UC Berkeley (http://astro.berkeley.edu/iya)
2008 Instructor, Chabot Space and Science Center Black Hole Summer Institute

- Frequent speaker to local astronomical societies and other groups

GRANTS

2016 NASA HST GO, $56,000, PI
2014 NSF AAG, $232,000, co-PI
2012 NASA ROSES Education Supplemental, $130,000, originator and co-lead
2012 NASA EPOESS, $670,000, originator and co-lead

2012 Fund for Astrophysical Research, $3,000, PI
2008 LLNL, $25,000, proposal author
2007 - 2014 Five AAS International Travel Grants, $7,000 total, PI
2007 NASA Spitzer GO, $133,000, PI
2005 NASA Spitzer Archival, $50,000, PI
1999 Corpus Christi College, Oxford, $4,000

ACTIVITIES AND ACHIEVEMENTS

Professional:

2016 Hubble Space Telescope Mid-Cycle Review Panel
2014 - Associate Member, NANOGrav collaboration
2014 - Associate Member, Murchison Widefield Array collaboration
2014 - Advisor, Square Kilometer Array Transient Science Working Group
2008- Seminar organizer, UC Berkeley Radio Astronomy Laboratory
2011 Co-organizer of workshop on radio transients at International Astronomical Union Symposium 285
2010 Participated in American Astronomical Society Congressional Visits
2009 4th Prize, Boeing / Griffith Observer Science Writing Competition
2009 Spitzer Space Telescope Cycle 6 Time Allocation Committee Extragalactic Panel

- Frequent journal referee (A&A, ApJ, AJ, MNRAS, PASP, Ap&SS, ASCOM)

Oxford University:

2002 Awarded Willmer Prize for science writing, Corpus Christi College, Oxford
2000 Senior Scholarship, Corpus Christi College
1999 - 2000 Organized lunchtime seminars, Oxford University Astrophysics

University College London:

1995 - 1997 President, Astronomy Society
1996 - 1998 Staff - Student Consultative Committee

COMPUTING SKILLS

Extensive experience with Mac OS, Windows, Linux, Python / Jupyter, Perl, C/C++, LaTeX, HTML, and astronomy data reduction environments MIRIAD, IRAF, AIPS, and CASA. Some familiarity with SQL, Fortran, IDL, Tcl/Tk. Much of my work involves extensive scripting, analysis of large datasets, visualization and image processing.

ASTRONOMY SKILLS

Experience preparing and executing observations, reducing and analyzing data in optical (imaging and spectroscopy), near- and mid-IR, and radio. Observer and PI on Allen Telescope Array (~40 days), CARMA (~30 days), and Lick 3-m (~40 nights). PI on successful HST, Spitzer, and GMRT proposals. Observer and co-I on GBT (> 300 hours), WHT, UKIRT, IRTF, Calar Alto 3.5-m, McDonald 0.8-m, Keck (14 nights), and McDonald 2.7-m (~70 nights, including 50 as sole telescope operator). Co-I on successful ALMA, MWA, VLA and Kepler proposals.

REFEREED PUBLICATIONS

42. **Space Telescope and Optical Reverberation Mapping Project. VII. Understanding the UV Anomaly in NGC 5548 with X-ray Spectroscopy**
Mathur, S., and 149 co-authors including **Croft, S.** 2017, ApJ, submitted
https://arxiv.org/abs/1704.06345

41. **ALMA observations of the interaction of a radio jet with molecular gas in Minkowski's Object**
Lacy, M., **Croft, S.**, Fragile, C., Wood, S., Nyland, K. 2017, ApJ, 838, 146.
https://arxiv.org/abs/1703.03006

40. **Numerical Simulations of a Jet-Cloud Collision and Starburst: Application to Minkowski's Object**
Fragile, C. P., Anninos, P., **Croft, S.**, Lacy, M., Witry, J. W. L., 2017, ApJ, submitted
http://arxiv.org/abs/1701.00024

39. **The Breakthrough Listen Search for Intelligent Life: Target Selection of Nearby Stars and Galaxies**
Isaacson, H., Siemion, A., Marcy, G., Lebofsky, M., Price, D., MacMahon, D., **Croft, S.**, DeBoer, D., Hickish, J., Werthimer, D., Hellbourg, G., Enriquez, E. 2017, PASP, 129, 054501.
http://arxiv.org/abs/1701.06227

38. **Space Telescope and Optical Reverberation Mapping Project. V. Optical Spectroscopic Campaign and Emission-Line Analysis**
Pei, L., and 153 co-authors including **Croft, S**. 2017, ApJ, 837, 131.
http://arxiv.org/abs/1702.01177

37. **Low Frequency Spectral Energy Distributions of Radio Pulsars from the Murchison Widefield Array**
Murphy, T., Kaplan, D. L., Bell, M. E., Callingham, J. R., **Croft, S.**, Johnston, S., Dobie, D., Zic, A., Hughes, J., Lynch, C., Hancock, P., Hurley-Walker, N., Lenc, E., Dwarakanath, K. S., For, B.-Q., Gaensler, B. M., Hindson, L., Johnston-Hollitt, M., Kapinska, A., McKinley, B., Morgan, J., Offringa, A. R., Procopio, P., Staveley-Smith, L., Wayth, R., Wu, C., Zheng, Q. 2017, PASA, 34, 20.

36. **A Search for Long-Timescale, Low-Frequency Radio Transients**
Murphy, T., Kaplan, D. L., **Croft, S.**, Lynch, C., Callingham, J. R., Bannister, K., Bell, M. E., Hurley-Walker, N., Hancock, P., Line, J., Rowlinson, A., Ekers, R. D., Tingay, S., Dwarakanath, K. S., For, B.-Q., Gaensler, B. M., Hindson, L., Johnston-Hollitt, M., Kapinska, A. D., McKinley, B., Morgan, J., Offringa, A. R., Procopio, P., Staveley-Smith, L., Wayth, R., Wu, C., Zheng, Q. 2017, MNRAS, 466, 1944.
http://arxiv.org/abs/1611.08354

35. **Transient Events in Archival Very Large Array Observations of the Galactic Center**
Chiti, A., Chatterjee, S., Wharton, R., Cordes, J. T., Lazio, W., Kaplan, D. L., Bower, G. C., **Croft, S.** 2016, ApJ, 833, 11
http://arxiv.org/abs/1610.00403

34. **Strategies for Finding Prompt Radio Counterparts to Gravitational Wave Transients with the Murchison Widefield Array**
Kaplan, D. L., Murphy, T., Rowlinson, A., **Croft, S. D**., Wayth, R. B. 2016, PASA, 33, 50
http://arxiv.org/abs/1609.00634

33. **Time-domain and Spectral Properties of Pulsars at 154 MHz**
Bell, M. E., Murphy, T., Johnston, S., Kaplan, D. L., **Croft, S.**, Hancock, P., Callingham, J. R., Zic, A., Dobie, D., Swiggum, J. K., Rowlinson, A., Hurley-Walker, N., Offringa, A. R., Bernardi, G., Bowman, J. D., Briggs, F., Cappallo, R. J., Deshpande, A. A., Gaensler, B. M., Greenhill, L. J., Hazelton, B. J., Johnston-Hollitt, M., Lonsdale, C. J., McWhirter, S. R., Mitchell, D. A., Morales, M. F., Morgan, E., Oberoi, D., Ord, S. M., Prabu, T., Udaya Shankar, N., Srivani, K. S., Subrahmanyan, R., Tingay, S., Wayth, R. B., Webster, R. L., Williams, A., Williams, C. L. 2016, MNRAS, 461, 908
http://arxiv.org/abs/1605.09100

32. **Supplement: Localization and Broadband Follow-up of the Gravitational-Wave Transient GW150914**
Abbott, B. P., and 1360 co-authors including **Croft, S**. 2016, ApJS, 225, 8
http://arxiv.org/abs/1604.07864

31. **Murchison Widefield Array Limits on Radio Emission from ANTARES Neutrino Events**
Croft., S., Kaplan, D. L., Tingay, S. J. and 130 additional co-authors 2016, ApJL, 820, 24
http://arxiv.org/abs/1603.02271

30. **Localization and Broadband Follow-up of the Gravitational-Wave Transient GW150914**
Abbott, B. P., and 1360 co-authors including **Croft, S**. 2016, ApJL, 826, 13
http://arxiv.org/abs/1602.08492

29. **A Deep Search for Prompt Radio Emission from the Short GRB 150424A with the Murchison Widefield Array**
Kaplan, D. L., Rowlinson, A., Bannister, K. W., Bell, M. E., **Croft, S.,** Murphy, T., Tingay, S. J., Wayth, R. B., Williams, A. 2015, ApJL, 814, 25
http://arxiv.org/abs/1511.03656

28. **Time domain studies of Active Galactic Nuclei with the Square Kilometre Array**
Bignall, H., **Croft, S.**, Hovatta, T., Koay, J. Y., Lazio, J., Macquart, J.-P., Reynolds, C. 2015, in Advancing Astrophysics with the Square Kilometre Array, PoS(AASKA14)058
http://arxiv.org/abs/1501.04627

27. **The Allen Telescope Array Pi GHz Sky Survey - III: The ELAIS-N1, Coma, and Lockman Hole Fields**
Croft, S., Bower, G. C., Whysong, D. 2013, ApJ, 762, 93
http://arxiv.org/abs/1211.4027

26. **ASGARD: A Large Survey for Slow Galactic Radio Transients - I: Overview and First Results**
Williams, P. K. G., Bower, G. C., **Croft, S.**, Keating, G. K., Law, C. J., Wright, M. 2013, ApJ, 762, 85
http://arxiv.org/abs/1211.1042

25. **VAST: An ASKAP Survey for Variables and Slow Transients**
Murphy, T., Chatterjee, S., Kaplan, D. L., Banyer, J., Bell, M. E., Bignall, H. E., Bower, G. C., Cameron, R., Coward, D. M., **Croft, S.**, Curran, J. R., Djorgovski, S. G., Farrell, S. A., Frail, D. A., Gaensler, B. M., Galloway, D. K., Gendre, B., Green, A. J., Hancock, P. J., Johnston, S., Kamble, A., Law, C. J., Lazio, T. J. W., Lo, K. K., Macquart, J-P., Rea, N., Rebbapragada, U., Reynolds, C., Ryder, S. D., Schmidt, B., Soria, R., Stairs, I. H., Tingay, S. J., Torkelsson, U., Wagstaff, K., Walker, M., Wayth, R. B., Williams, P. K. G. 2013, PASA, 30, 6
http://arxiv.org/abs/1207.1528

24. **X-Ray Observations of Radio Transients without Optical Hosts**
Croft, S., Tomsick, J., Bower, G. C. 2011, ApJ, 740, 87
http://arxiv.org/abs/1107.5039

23. **The Allen Telescope Array Pi GHz Survey II. Daily and Monthly Monitoring for Transients and Variability in the Bootes Field**
Bower, G. C., Whysong, D., Blair, S., **Croft, S.**, Keating, G., Law, C., Williams, P. K. G., Wright, M. 2011, ApJ, 739, 76
http://arxiv.org/abs/1107.1517

22. **Primary Beam and Dish Surface Characterization at the Allen Telescope Array by Radio Holography**
Harp, G. R., Ackerman, R. F., Nadler, Z. J, Blair, S. K., Davis, M. M., Wright, M. C. H., Forster, J. R., DeBoer, D. R., Welch, W. J., Atkinson, S., Backer, D. C., Backus, P. R., Barott, W., Bauermeister, A., Blitz, L., Bock, D. C.-J., Bower, G. C., Bradford, T., Cheng. C., **Croft, S.**, Dexter, M., Dreher, J., Engargiola, G., Fields, E. D., Heiles, C., Helfer, T., Jordan, J., Jorgensen, S., Kilsdonk, T., Gutierrez-Kraybill, C., Keating, G., Law, C., Lugten, J., MacMahon, D. H. E., McMahon, P., Milgrome, O., Siemion, A., Smolek, K., Thornton, D., Pierson, T., Randall, K., Ross, J., Shostak, S., Tarter, J. C., Urry, L., Werthimer, D., Williams, P. K. G., Whysong, D. 2011 IEEE Transactions on Antennas and Propagation, 59, 2004
http://arxiv.org/abs/1210.8246

21. **The Allen Telescope Array Twenty-centimeter Survey - A 700-Square-Degree, Multi-Epoch Radio Dataset - II: Individual Epoch Transient Statistics**
Croft, S., Bower, G. C., Keating, G., Law, C., Whysong, D., Williams, P. K. G., Wright, M. 2011, ApJ, 731, 34
http://arxiv.org/abs/1102.2227

20. **Spectropolarimetry with the Allen Telescope Array: Faraday Rotation toward Bright Polarized Radio Galaxies**
Law, C. J., Gaensler, B. M., Bower, G. C., Backer, D. C., Bauermeister, A., **Croft, S.**, Forster, R., Gutierrez-Kraybill, C., Harvey-Smith, L., Heiles, C., Hull, C., Keating, G., MacMahon, D., Whysong, D., Williams, P. K. G., Wright, M. 2011, ApJ, 728, 57
http://arxiv.org/abs/1012.0945

19. **Primary Beam Shape Calibration from Mosaicked Observations**
Hull, C. L. H., Bower, G. C., **Croft, S.**, Williams, P. K. G., Law, C., Whysong, D. 2010, PASP, 122, 1510
http://arxiv.org/abs/1010.1064

18. **The Allen Telescope Array Pi GHz Sky Survey I. Survey Description and Static Catalog Results for the Bootes Field**
Bower, G. C., **Croft, S.**, Keating, S., Whysong, D., Ackermann, R., Atkinson, S., Backer, D., Backus, P., Barott, W., Bauermeister, A., Blitz, L., Bock, D., Bradford, T., Cheng, C., Cork, C., Davis, M., DeBoer, D., Dexter, M., Dreher, J., Engargiola, G., Fields, E., Fleming, M., Forster, R. J., Gutierrez-Kraybill, C., Harp, G., Heiles, C., Helfer, T., Hull, C., Jordan, J., Jorgensen, S., Kilsdonk, T., Law, C., van Leeuwen, J., Lugten, J., MacMahon, D., McMahon, P., Milgrome, O., Pierson, T., Randall, K., Ross, J., Shostak, S., Siemion, A., Smolek, K., Tarter, J., Thornton, D., Urry, L., Vitouchkine, A., Wadefalk, N., Weinreb, S., Welch, J., Werthimer, D., Williams, P. K. G., Wright, M. 2010, ApJ, 725, 1792
http://arxiv.org/abs/1009.4443

17. **The Multi-Wavelength Extreme Starburst Sample of Luminous Galaxies – I: Sample Characteristics**
Laag, E., **Croft, S.**, Canalizo, G., Lacy, M. 2010, AJ, 140, 2052
http://arxiv.org/abs/1010.1704

16. **The Allen Telescope Array Twenty-centimeter Survey - A 690-Square-Degree, 12-Epoch Radio Dataset - I: Catalog and Long-Duration Transient Statistics**
Croft, S., Bower, G., Backer, D., Blitz, L., Bock, D., Cheng, C., Cork, C., Dexter, M., Engargiola, G., Fields, E., Forster, J. R., Gutierrez-Kraybill, C., Helfer, T., Jorgensen, S., Keating, G., Lugten, J., MacMahon, D., Milgrome, O., Thornton, D., Urry, L., Law, C., van Leeuwen, J., Werthimer, D., Wright, M., Tarter, J., Ackermann, R., Atkinson, S., Backus, P., Barott, W., Bradford, T., Davis, M., DeBoer, D., Dreher, J., Harp, G., Jordan, J., Kilsdonk, T., Pierson, T., Randall, K., Ross, J., Shostak, S., Fleming, M., Vitouchkine, A., Wadefalk, N., Welch, J., Williams, P., Smolek, K., Siemion, A., Whysong, D., McMahon, P. 2010, ApJ, 719, 45
http://arxiv.org/abs/1006.2003

15. **A Galaxy Populations Study of a Radio-Selected Protocluster at z~3.1**
Kuiper, E., Hatch, N. A., Röttgering, H. J. A., Miley, G. K., Overzier, R. A., Venemans, B. P., De Breuck, C., **Croft, S.**, Kajisawa, M., Kodama, T., Kurk, J. D., Pentericci, L., Stanford, S. A., Tanaka, I., Zirm, A. W. 2010, MNRAS, 405, 969.
http://arxiv.org/abs/1002.4198

14. **Mid-Infrared Variability from the Spitzer Deep, Wide-Field Survey (SDWFS)**
Kozlowski, S., Kochanek, C. S., Stern, D., Ashby, M. L. N., Assef, R. J., Bock, J. J., Borys, C., Brand, K., Brodwin, M., Brown, M. J. I., Cool, R., Cooray, A., **Croft, S.**, Dey, A., Eisenhardt, P. R., Gonzalez, A., Gorjian, V., Griffith, R., Grogin, N., Ivison, R., Jacob, J., Jannuzi, B. T., Mainzer, A., Moustakas, L., Röttgering, H., Seymour, N., Smith, H. A., Stanford, S. A., Stauffer, J. R., Sullivan, I. S., van Breugel, W., Willner, S. P., Wright, E. L. 2010, ApJ, 716, 530
http://arxiv.org/abs/1002.3365

13. **The TexOx-1000 redshift survey of radio sources I: the TOOT00 region**
Vardoulaki, E., Rawlings, S., Hill, G. J., Inskip, K., Riley, J., Brand, K., **Croft, S.**, Mauch, T., Willott, C. 2009, MNRAS, 401, 1709
http://arxiv.org/abs/0909.5691

12. **The Allen Telescope Array: The First Widefield, Panchromatic, Snapshot Radio Camera for Radio Astronomy and SETI**
Welch, J., Backer, D., Blitz, L., Bock, D., Bower, G. C., Cheng, C., **Croft, S.**, Dexter, M., Engargiola, G., Fields, E., Forster, R., Gutierrez-Kraybill, C., Heiles, C., Helfer, T., Jorgensen, S., Keating, G., Lugten, J., MacMahon, D., Milgrome, O., Thornton, D., Urry, L., van Leeuwen, J., Werthimer, D., Williams, P., Wright, M., Tarter, J., Ackermann, R., Atkinson, S., Backus, P., Barott, W., Bradford, T., Davis, M., DeBoer, D., Dreher, J., Harp, G., Jordan, J., Kilsdonk, T., Pierson, T., Randall, K., Ross, J., Shostak, S., Fleming, M., Cork, C., Vitouchkine, A., Wadefalk, N, Weinreb, S. 2009, Proceedings of the IEEE, 97, 1438
http://arxiv.org/abs/0904.0762

11. **The Spitzer Deep, Wide-Field Survey (SDWFS)**
Ashby, M. L. N., Stern, D., Brodwin, M., Eisenhardt, P., Kozlowski, S., Bock, J. J., Borys, C., Brand, K., Brown, M. J. I., Cool, R., Cooray, A., **Croft, S.**, Dey, A., Eisenstein, D., Gonzalez, A., Gorjian, V., Griffith, R., Grogin, N., Ivison, R., Jacob, J., Jannuzi, B., Kochanek, C., Mainzer, A., Moustakas, L., Röttgering, H. J. A., Seymour, N., Smith, H. A., Stanford, A., Sullivan, I., van Breugel, W., Wright, E. L., Willner, S. P. 2009, ApJ, 701, 428
http://arxiv.org/abs/0906.0024

10. **A young, dusty, compact radio source within a large Lyα halo**
Barrio, F. E., Jarvis, M. J., Rawlings, S., Bauer, A., **Croft, S.**, Hill, G. J., Manchado, A., McLure, R. J., Smith, D. J. B., Targett, T. A. 2008, MNRAS, 389, 792
http://arxiv.org/abs/0806.3688

9. **Radio-loud high-redshift protogalaxy candidates in Boötes**
Croft, S., van Breugel, W., Brown, M. J. I., de Vries, W., Dey, A., Eisenhardt, P., Jannuzi, B., Röttgering, H, Stanford, S. A., Stern, D., Willner, S. P. 2008, AJ, 135, 1793
http://arxiv.org/abs/0803.0325

8. **Radio AGNs in 13,240 galaxy clusters from the Sloan Digital Sky Survey**
Croft, S., de Vries, W., Becker, R. H. 2007, ApJL, 667, 13
http://arxiv.org/abs/0708.0585

7. **Imaging and Spectroscopy of a sample of Ultra Steep Spectrum Radio Sources**
Bornancini, C. G., De Breuck, C., de Vries, W., **Croft, S.**, van Breugel, W., Röttgering, H, Minniti, D. 2007, MNRAS, 378, 551
http://arxiv.org/abs/astro-ph/0703664

6. **Protoclusters associated with z > 2 radio galaxies I. Characteristics of high redshift protoclusters**
Venemans, B. P., Röttgering, H. J. A, Miley, G. K., van Breugel, W. J. M., De Breuck, C., Kurk, J. D., Pentericci, L., Stanford, S. A., Overzier, R. A., **Croft, S.**, Ford, H. 2007, A&A, 461, 823
http://arxiv.org/abs/astro-ph/0610567

5. **The 6C** sample of steep-spectrum radio sources: I – Radio data, near-infrared imaging and optical spectroscopy**
Cruz, M. J., Jarvis, M. J., Blundell, K. M., Rawlings, S., **Croft, S.**, Klöeckner, H.-R., McLure, R. J., Simpson, C., Targett, T. A., Willott, C. J. 2006, MNRAS, 373, 1531
http://arxiv.org/abs/astro-ph/0609790

4. **Minkowski's Object: A Starburst Triggered by a Radio Jet, Revisited**
Croft, S., van Breugel, W., de Vries, W., Dopita, M., Martin, C., Morganti, R., Neff, S., Oosterloo, T., Schiminovich, D., Stanford, S. A., van Gorkum, J. 2006, ApJ, 647, 1040
http://arxiv.org/abs/astro-ph/0604557

3. **The filamentary Large Scale Structure around the z = 2.16 radio galaxy PKS 1138-262**
Croft, S., Kurk, J., van Breugel, W., Stanford, S. A., de Vries, W., Pentericci, L., Rottgering, H. 2005, AJ, 130, 867
http://arxiv.org/abs/astro-ph/0505354

2. **Detection of a CMB decrement towards a cluster of mJy radiosources**
Cotter, G., Buttery, H. J., Rawlings, S., **Croft, S.**, Hill, G. J., Das, R., Drory, N., Grainge, K., Grainger, W. F., Jones, M. E., Pooley, G. G., Saunders, R. 2002 MNRAS, 331, 1
http://arxiv.org/abs/astro-ph/0109506

1. **A sample of 6C radio sources designed to find objects at redshift > 4: III - imaging and the radio galaxy K-z relation**
Jarvis, M. J., Rawlings, S., Eales, S., Blundell, K. M., Bunker, A. J., **Croft, S.**, McClure, R. J., Willott, C. J. 2001 MNRAS, 326, 1585
http://arxiv.org/abs/astro-ph/0106130

CONFERENCE PROCEEDINGS, WHITE PAPERS, AND OTHER PUBLICATIONS

15. ***A Drop in Optical Flux from Boyajian's Star***
Boyajian, T., **Croft, S.,** Wright, J., Siemion, A., Muterspaugh, M., Siegel, M., Bruce, G., Wright, S., Maire, J., Duenas, A., Hultgren, C., Ramos, J. 2017, ATel 10405
http://www.astronomerstelegram.org/?read=10405

14. ***Breakthrough Listen* Follow-up of a Transient Signal from the RATAN-600 Telescope in the Direction of HD 164595**
Croft, S., Siemion, A., MacMahon, D., Lebofsky, M., Isaacson, H., Hickish, J., Price, D., Werthimer, D., Gajjar, V., DeBoer, D. 2016, Berkeley SETI Research Center Memo
https://seti.berkeley.edu/HD164595.pdf

13. **Art in Science Promoting Interest in Research and Exploration (ASPIRE)**
Fillingim, M., Zevin, D., Thrall, L., **Croft, S**., Raftery, C., Shackelford, R. 2015, ASP Conf. Series Vol. 500
http://aspbooks.org/custom/publications/paper/500-0265.html

12. **Full STEAM Ahead with the NASA Opportunities in Visualization, Art, and Science (NOVAS) Program**
Zevin, D., **Croft, S.**, Thrall, L., Fillingim, M., Cook, L. R. 2015, ASP Conf. Series Vol. 500
http://aspbooks.org/custom/publications/paper/500-0093.html

11. **Wide-Field Imaging and Transient Statistics from the ATA 20 cm Survey**
Croft, S., Bower, G. 2010, Proceedings of Science, ISKAF2010, 014
http://pos.sissa.it/archive/conferences/112/014/ISKAF2010_014.pdf

10. **UC Berkeley's Celebration of the International Year of Astronomy 2009**
Cobb, B. E.., **Croft, S.**, Silverman, J. M., Klein, C., Modjaz, M. 2010, ASP Conf. Series Vol. 431
http://aspbooks.org/custom/publications/paper/431-0347.html

9. **The Dynamic Radio Sky: An Opportunity for Discovery**
Lazio, J., Bloom, J. S., Bower, G. C., Cordes, J., **Croft, S.**, Hyman, S., Law, C., McLaughlin, M. 2009, Astro2010 Decadal Survey Science white paper.
http://arxiv.org/abs/0904.0633

8. **High Redshift Lyα Haloes**
van Breugel, W., de Vries, W., **Croft, S.**, De Breuck, C., Dopita, M., Miley, G., Reuland, M., Röttgering, H. 2006, AN, 327, 175

7. **The TOOT00 Redshift Survey of Radio Sources**
Vardoulaki, E., Rawlings, S., Hill, G. J., **Croft, S.**, Brand, K., Riley, J., Willott, C. 2006, AN, 327, 282
http://arxiv.org/abs/astro-ph/0509491

6. **Jet-Induced Star Formation: Good News From Big Bad Black Holes**
van Breugel, W., Fragile, C., **Croft, S.**, de Vries, W., Anninos, P., Murray, S. 2004, IAU Symposium Series
http://arxiv.org/abs/astro-ph/0406668

5. **Radio galaxy proto-clusters**
van Breugel, W., Venemans, B., Kurk, J., Rottgering, H., Miley, G., **Croft, S.**, Stanford, A. 2004, IAU Symposium Series

4. **A large-area search for radio-loud quasars within the epoch of reionization**
Jarvis, M. J., Rawlings, S., Barrio, F.E., Hill, G. J., Bauer, A., **Croft, S.** 2004 in the proceedings of the conference "Multiwavelength AGN Surveys", Cozumel, Mexico, 8-13 December 2003, eds. R. Mujica, R. Maiolino
http://arxiv.org/abs/astro-ph/0404157

3. **A search for radio-loud quasars within the epoch of reionization**
Jarvis, M. J., Rawlings, S., Barrio, F.E., Hill, G. J., Bauer, A., **Croft, S.** 2004 in ASP Conference Series 311, "AGN Physics with the Sloan Digital Sky Survey", Princeton, 27-30 July 2003, eds. G. T. Richards, P. B. Hall
http://arxiv.org/abs/astro-ph/0309379

2. **High-redshift clusters from NVSS: The TexOx Cluster (TOC) Survey**
Croft, S., Rawlings, S., Hill, G. J. 2003 New Astronomy Reviews, 447, 333
http://arxiv.org/abs/astro-ph/0301337

1. **The TexOx Survey of Radio-Selected Galaxy Clusters**
Croft, S., Rawlings, S., Hill, G. J., Gay, P. L., Tufts, J. R. 2002 in ASP Conference Series 268, "Tracing Cosmic Evolution with Galaxy Clusters", Sesto, 3-6 July 2001, eds. S. Borgani, M. Mezzetti, R. Valdarnini
http://arxiv.org/abs/astro-ph/0110119

RESEARCH TALKS

Invited talks and colloquia:

Colloquium at Manchester University, UK, May 2017
Keynote, “Northern EdTech Conference”, Leeds, UK, May 2017
Colloquium at Louisiana State University, Baton Rouge, LA, March 2017
Invited summary talk at “SKA 2016: Science for the SKA generation”, Goa, India, November 2016
Invited talk at “Boutiques and Experiments”, Caltech, July 2016
Featured speaker at Malone Heads of School conference, Stanford, June 2016
Invited talk at CSIRO, Sydney, Australia, February 2015
Invited talk at Monash University, Melbourne, Australia, February 2015
Invited talk at Swinburne University, Melbourne, Australia, February 2015
Invited talk at "Multi-wavelength Emission from Accreting Black Holes", Sydney, Australia, February 2015
Invited talk at "Advancing Astrophysics with the Square Kilometer Array", Giardini Naxos, Italy, June 2014
Invited talk at "Exploring the Transient Radio Sky", Sydney, Australia, December 2013
Colloquium at the SETI Institute, Mountain View, CA, April 2013
Invited talk at University of Wisconsin-Milwaukee, November 2012
Invited talk at University of Wisconsin-Madison, November 2012
Invited talk at Sydney University, Australia, November 2011
Colloquium at Liverpool John Moores University, UK, October 2010
Colloquium at Lawrence Livermore National Laboratory, CA, USA, November 2008
Invited talk at UC Santa Cruz, CA, USA, October 2007

Contributed talks:

Radio Galaxies: Past, Present, and Future (Netherlands); AAS Denver; Obscured AGN Across Cosmic Time (Germany); The First Science with LOFAR Surveys (Netherlands); LOFAR and the Transient Radio Sky (Netherlands); AAS Long Beach; UC Berkeley Graduate Student / Postdoc Seminar; The Eventful Universe (Tucson, AZ); A New Golden Age for Radio Astronomy (Netherlands); ASKAP Survey Science Meeting (Australia); AAS Austin 2012; UC Berkeley Radio Astronomy Lab seminar; Radio Astronomy in the LSST Era (Charlottesville, VA); Locating Astrophysical Transients (Netherlands); Transformational Science with the SKA (South Africa); Oxford University (UK); Science at Low Frequencies II (Albuquerque, NM); Science at Low Frequencies III (Pasadena, CA); The Broad Impact of Low Frequency Observing (Bologna, Italy); European Week of Astronomy and Space Science (Prague, Czech Republic)

Poster presentations:

NAM Cambridge (UK); NAM Bristol (UK); AAS DC 2002; Tracing Cosmic Evolution with Galaxy Clusters (Italy); XIII Rencontres de Blois (France), AAS San Diego; Infrared Diagnostics of Galaxy Evolution (Pasadena, CA); AAS Seattle; VLTI Summer School (Poland); AAS Austin; Deep Surveys of the Radio Universe with SKA Pathfinders (Australia); AAS Pasadena; AAS DC 2010; AAS Seattle 2011; New Horizons in Time Domain Astronomy (UK); AGN Variability and Tidal Disruption Events (Spain)