



## Steven Allen

Professor of Physics and of Particle Physics and Astrophysics

 Curriculum Vitae available Online

### Bio

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#### BIO

Steve Allen studies the properties of galaxies and galaxy clusters and uses these systems as cosmological probes. His X-ray Astronomy and Observational Cosmology (XOC) group at Stanford have pioneered novel analysis approaches in these areas, with an emphasis on X-ray techniques. The XOC group are also engaged in the development of hardware for future X-ray satellite missions including the Athena X-ray observatory and Lynx. Allen has co-authored more than 200 publications in refereed journals which have gathered more than 20,000 citations. He is a member of the Athena Science Study Team, the Athena Wide Field Imager Consortium, the Lynx Science and Technology Definition Team, the Hitomi Science Team, the Dark Energy Survey, the Dark Energy Spectroscopic Instrument, the Euclid Consortium, the South Pole Telescope Collaboration, the CMB-S4 Collaboration, and the LSST Dark Energy Science Collaboration. He also heads the LSST Science Department at SLAC National Accelerator Laboratory and chairs the SLAC LSST Steering Committee.

#### ACADEMIC APPOINTMENTS

- Professor, Physics
- Professor, Particle Physics and Astrophysics

#### ADMINISTRATIVE APPOINTMENTS

- Professor, Department of Physics, Stanford University, (2015- present)
- Professor, Department of Particle Physics and Astrophysics, SLAC National Accelerator Laboratory, (2015- present)
- Department Head, LSST Science Department, SLAC National Accelerator Laboratory, (2014- present)
- Associate Professor, Department of Particle Physics and Astrophysics, SLAC National Accelerator Laboratory., (2008-2015)
- Associate Professor, Department of Physics, Stanford University., (2008-2015)
- Department Head, Department of Observational and Experimental Cosmology, SLAC National Accelerator Laboratory, (2005-2014)
- Assistant Professor, Department of Particle Physics and Astrophysics, SLAC National Accelerator Laboratory., (2005-2008)
- Assistant Professor, Department of Physics, Stanford University., (2005-2008)

#### HONORS AND AWARDS

- Sophie and Tycho Brahe Visiting Professorship, University of Copenhagen (2012 - 2015)
- Bruno Rossi Prize, American Astronomical Society (2008)
- Royal Society University Research Fellowship, Royal Society (1999)
- Postdoctoral Research Fellowship, UK Particle Physics and Astronomy Research Council (1994)

## **BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS**

- DOE Point of Contact, LSST Dark Energy Science Collaboration (2015 - 2019)
- Member, American Physical Society (2018 - present)
- Senior Member, Simons Observatory (2018 - present)
- Member, CMB-S4 Collaboration (2016 - present)
- Member, Lynx Science and Technology Definition Team (2016 - present)
- Member, Athena Wide Field Imager Consortium (2016 - present)
- Chair, LSST Steering Committee, SLAC (2014 - present)
- Member, Athena Science Study Team (2014 - present)
- Member, Dark Energy Survey (2014 - present)
- Member, South Pole Telescope Collaboration (2013 - present)
- Member, Euclid Science Consortium (2010 - present)
- Member, American Astronomical Society (AAS) (2006 - present)
- Associate, Dark Cosmology Center, Copenhagen (2005 - present)
- Member, Kavli Institute for Particle Astrophysics and Cosmology (2005 - present)
- Member, Institute of Physics (1993 - present)
- Member, Royal College of Science Association (1990 - present)
- Co-chair, Clusters Working Group, LSST Dark Energy Science Collaboration (2012 - 2017)
- Member, High Energy Astrophysics Division Nomination Committee, NASA (2011 - 2012)
- Member, Einstein Fellowship Selection Committee (2011 - 2011)
- Co-chair, Astro-H Cosmology Science Working Group (2010 - 2017)
- Member, Science Definition Team, International X-ray Observatory (2008 - 2011)
- Member, Chandra Users' Committee, Chandra X-ray Observatory (2008 - 2011)
- Chair, Constellation-X Large Scale Structure panel, NASA (2007 - 2008)
- Member, KIPAC Executive Committee (2006 - 2014)
- Member, Constellation-X Facility Science Team, NASA (2004 - 2008)
- Member, Constellation-X Galaxy Clusters Science panel, NASA (2004 - 2008)
- Member, Chandra Peer Review Panel, Chandra X-ray Observatory (2000 - 2007)
- Member, Governing Body, Darwin College, Cambridge (1996 - 1999)

## **PROFESSIONAL EDUCATION**

- B. Sc., Imperial College, University of London. , Physics (1990)
- Ph.D., University of Cambridge. , Astronomy (1995)

## **LINKS**

- My research group: <https://web.stanford.edu/group/xoc/>

## Research & Scholarship

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### CURRENT RESEARCH AND SCHOLARLY INTERESTS

Observational astrophysics and cosmology; galaxies, galaxy clusters, dark matter and dark energy; applications of statistical methods; X-ray astronomy; X-ray detector development; optical astronomy; mm-wave astronomy; radio astronomy; gravitational lensing.

## Teaching

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### COURSES

#### 2020-21

- Introduction to Observational Astrophysics: PHYSICS 100 (Spr)

#### 2019-20

- Introduction to Observational Astrophysics: PHYSICS 100 (Spr)

#### 2017-18

- Introduction to Observational Astrophysics: PHYSICS 100 (Spr)

### STANFORD ADVISEES

#### Doctoral Dissertation Reader (AC)

Eric Yang

#### Postdoctoral Faculty Sponsor

Tanmoy Chattopadhyay, Martijn Nicolaas De Vries, Adi Foord, Meredith Powell

#### Doctoral Dissertation Advisor (AC)

Justin Myles, Emil Noordeh

#### Doctoral (Program)

Mahiro Abe, James Allen, Drew Ames, Sanha Cheong, Jason Chou, Jason Corbin, Laura Domine, Kevin Feigelis, Ares Hernandez, Fangze Liu, Tom Liu, Jamie McCullough, Yuka Nakato, Remy Schutt, Charles Titus, Bahrudin Trbalic, Sebastian Wagner-Carena, Bingyi Wang, To Chin Yu

## Publications

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### PUBLICATIONS

- **Deep XMM-Newton observations of the most distant SPT-SZ galaxy cluster** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Mantz, A. B., Allen, S. W., Morris, R., Canning, R. A., Bayliss, M., Bleem, L. E., Floyd, B. T., McDonald, M.  
2020; 496 (2): 1554–64
- **Characterization of the Particle-induced Background of XMM-Newton EPIC-pn: Short- and Long-term Variability** *ASTROPHYSICAL JOURNAL*  
Bulbul, E., Kraft, R., Nulsen, P., Freyberg, M., Miller, E. D., Grant, C., Bautz, M. W., Burrows, D. N., Allen, S., Eraerds, T., Fioretti, V., Gastaldello, F., Ghirardini, et al  
2020; 891 (1)
- **Ellipticity of brightest cluster galaxies as tracer of halo orientation and weak-lensing mass bias** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Herbonnet, R., von der Linden, A., Allen, S. W., Mantz, A. B., Modumudi, P., Morris, R., Kelly, P. L.  
2019; 490 (4): 4889–97
- **Detection of polarized gamma-ray emission from the Crab nebula with the Hitomi Soft Gamma-ray Detector** *PUBLICATIONS OF THE ASTRONOMICAL SOCIETY OF JAPAN*

- Aharonian, F., Akamatsu, H., Akimoto, F., Allen, S. W., Angelini, L., Audard, M., Awaki, H., Axelsson, M., Bamba, A., Bautz, M. W., Blandford, R., Brenneman, L. W., Brown, et al  
2018; 70 (6)
- **Gas Perturbations in the Cool Cores of Galaxy Clusters: Effective Equation of State, Velocity Power Spectra, and Turbulent Heating** *ASTROPHYSICAL JOURNAL*  
Zhuravleva, I., Allen, S. W., Mantz, A., Werner, N.  
2018; 865 (1)
  - **Hitomi X-ray observation of the pulsar wind nebula G21.5-0.9** *PUBLICATIONS OF THE ASTRONOMICAL SOCIETY OF JAPAN*  
Aharonian, F., Akamatsu, H., Akimoto, F., Allen, S. W., Angelini, L., Audard, M., Awaki, H., Axelsson, M., Bamba, A., Bautz, M. W., Blandford, R., Brenneman, L. W., Brown, et al  
2018; 70 (3)
  - **Hitomi (ASTRO-H) X-ray Astronomy Satellite** *JOURNAL OF ASTRONOMICAL TELESCOPES INSTRUMENTS AND SYSTEMS*  
Takahashi, T., Kokubun, M., Mitsuda, K., Kelley, R. L., Ohashi, T., Aharonian, F., Akamatsu, H., Akimoto, F., Allen, S. W., Anabuki, N., Angelini, L., Arnaud, K., Asai, et al  
2018; 4 (2)
  - **XMM-Newton X-ray and HST weak gravitational lensing study of the extremely X-ray luminous galaxy cluster Cl J120958.9+495352 ( $z=0.902$ )** *ASTRONOMY & ASTROPHYSICS*  
Thoelken, S., Schrabback, T., Reiprich, T. H., Lovisari, L., Allen, S. W., Hoekstra, H., Applegate, D., Buddendiek, A., Hicks, A.  
2018; 610
  - **Hitomi observations of the LMC SNR N 132 D: Highly redshifted X-ray emission from iron ejecta** *PUBLICATIONS OF THE ASTRONOMICAL SOCIETY OF JAPAN*  
Aharonian, F., Akamatsu, H., Akimoto, F., Allen, S. W., Angelini, L., Audard, M., Awaki, H., Axelsson, M., Bamba, A., Bautz, M. W., Blandford, R., Brenneman, L. W., Brown, et al  
2018; 70 (2)
  - **Temperature structure in the Perseus cluster core observed with Hitomi** *PUBLICATIONS OF THE ASTRONOMICAL SOCIETY OF JAPAN*  
Aharonian, F., Akamatsu, H., Akimoto, F., Allen, S. W., Angelini, L., Audard, M., Awaki, H., Axelsson, M., Bamba, A., Bautz, M. W., Blandford, R., Brenneman, L. W., Brown, et al  
2018; 70 (2)
  - **Hitomi observation of radio galaxy NGC 1275: The first X-ray microcalorimeter spectroscopy of Fe-K alpha line emission from an active galactic nucleus** *PUBLICATIONS OF THE ASTRONOMICAL SOCIETY OF JAPAN*  
Aharonian, F., Akamatsu, H., Akimoto, F., Allen, S. W., Angelini, L., Audard, M., Awaki, H., Axelsson, M., Bamba, A., Bautz, M. W., Blandford, R., Brenneman, L. W., Brown, et al  
2018; 70 (2)
  - **Measurements of resonant scattering in the Perseus Cluster core with Hitomi SXS** *PUBLICATIONS OF THE ASTRONOMICAL SOCIETY OF JAPAN*  
Aharonian, F., Akamatsu, H., Akimoto, F., Allen, S. W., Angelini, L., Audard, M., Awaki, H., Axelsson, M., Bamba, A., Bautz, M. W., Blandford, R., Brenneman, L. W., Brown, et al  
2018; 70 (2)
  - **Search for thermal X-ray features from the Crab nebula with the Hitomi soft X-ray spectrometer** *PUBLICATIONS OF THE ASTRONOMICAL SOCIETY OF JAPAN*  
Aharonian, F., Akamatsu, H., Akimoto, F., Allen, S. W., Angelini, L., Audard, M., Awaki, H., Axelsson, M., Bamba, A., Bautz, M. W., Blandford, R., Brenneman, L. W., Brown, et al  
2018; 70 (2)
  - **Atomic data and spectral modeling constraints from high-resolution X-ray observations of the Perseus cluster with Hitomi** *PUBLICATIONS OF THE ASTRONOMICAL SOCIETY OF JAPAN*  
Aharonian, F., Akamatsu, H., Akimoto, F., Allen, S. W., Angelini, L., Audard, M., Awaki, H., Axelsson, M., Bamba, A., Bautz, M. W., Blandford, R., Brenneman, L. W., Brown, et al  
2018; 70 (2)
  - **Glimpse of the highly obscured HMXB IGR J16318-4848 with Hitomi** *PUBLICATIONS OF THE ASTRONOMICAL SOCIETY OF JAPAN*  
Aharonian, F., Akamatsu, H., Akimoto, F., Allen, S. W., Angelini, L., Audard, M., Awaki, H., Axelsson, M., Bamba, A., Bautz, M. W., Blandford, R., Brenneman, L. W., Brown, et al  
2018; 70 (2)

- **Atmospheric gas dynamics in the Perseus cluster observed with Hitomi** *PUBLICATIONS OF THE ASTRONOMICAL SOCIETY OF JAPAN*  
Aharonian, F., Akamatsu, H., Akimoto, F., Allen, S. W., Angelini, L., Audard, M., Awaki, H., Axelsson, M., Bamba, A., Bautz, M. W., Blandford, R., Brenneman, L. W., Brown, et al  
2018; 70 (2)
- **Hitomi X-ray studies of giant radio pulses from the Crab pulsar** *PUBLICATIONS OF THE ASTRONOMICAL SOCIETY OF JAPAN*  
Aharonian, F., Akamatsu, H., Akimoto, F., Allen, S. W., Angelini, L., Audard, M., Awaki, H., Axelsson, M., Bamba, A., Bautz, M. W., Blandford, R., Brenneman, L. W., Brown, et al  
2018; 70 (2)
- **Cold dark energy constraints from the abundance of galaxy clusters** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Heneka, C., Rapetti, D., Cataneo, M., Mantz, A. B., Allen, S. W., von der Linden, A.  
2018; 473 (3): 3882–94
- **The Athena WFI Science Products Module**  
Burrows, D. N., Allen, S., Bautz, M., Bulbul, E., Erdley, J., Falcone, A. D., Fort, S., Grant, C. E., Herrmann, S., Kennea, J., Klar, R., Kraft, R., Mantz, et al  
SPIE-INT SOC OPTICAL ENGINEERING.2018
- **Characterizing Particle Background of ATHENA WFI for the Science Products Module: Swift XRT Full Frame and XMM-PN Small Window Mode Observations**  
Bulbul, E., Kraft, R., Nulsen, P., Miller, E., Grant, C., Bautz, M., Burrows, D. N., Allen, S., DenHerder, J. W., Nikzad, S., Nakazawa, K.  
SPIE-INT SOC OPTICAL ENGINEERING.2018
- **Reducing the Athena WFI Background with the Science Products Module: Lessons from Chandra ACIS**  
Grant, C. E., Miller, E. D., Bautz, M. W., Bulbul, E., Kraft, R. P., Nulsen, P., Burrows, D. N., Allen, S., DenHerder, J. W., Nikzad, S., Nakazawa, K.  
SPIE-INT SOC OPTICAL ENGINEERING.2018
- **Hitomi X-ray studies of Giant Radio Pulses from the Crab pulsar.** *Publications of the Astronomical Society of Japan. Nihon Tenmon Gakkai*  
Aharonian, F., Akamatsu, H., Akimoto, F., Allen, S. W., Angelini, L., Audard, M., Awaki, H., Axelsson, M., Bamba, A., Bautz, M. W., Blandford, R., Brenneman, L. W., Brown, et al  
2018; 70 (2)
- **Centre-excised X-ray luminosity as an efficient mass proxy for future galaxy cluster surveys** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Mantz, A. B., Allen, S. W., Morris, R., von der Linden, A.  
2018; 473 (3): 3072–79
- **The metallicity of the intracluster medium over cosmic time: further evidence for early enrichment** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Mantz, A. B., Allen, S. W., Morris, R., Simionescu, A., Urban, O., Werner, N., Zhuravleva, I.  
2017; 472 (3): 2877–88
- **Solar abundance ratios of the iron-peak elements in the Perseus cluster** *NATURE*  
Aharonian, F., Akamatsu, H., Akimoto, F., Allen, S. W., Angelini, L., Audard, M., Awaki, H., Axelsson, M., Bamba, A., Bautz, M. W., Blandford, R., Brenneman, L. W., Brown, et al  
2017; 551 (7681): 478+
- **Hitomi Constraints on the 3.5 keV Line in the Perseus Galaxy Cluster** *ASTROPHYSICAL JOURNAL LETTERS*  
Aharonian, F. A., Akamatsu, H., Akimoto, F., Allen, S. W., Angelini, L., Arnaud, K. A., Audard, M., Awaki, H., Axelsson, M., Bamba, A., Bautz, M. W., Blandford, R. D., Bulbul, et al  
2017; 837 (1)
- **A series of shocks and edges in Abell 2219** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Canning, R. E., Allen, S. W., APPLEGATE, D. E., Kelly, P. L., Von der Linden, A., Mantz, A., Million, E., Morris, R. G., Russell, H. R.  
2017; 464 (3): 2896-2909
- **Weighing the giants - V. Galaxy cluster scaling relations** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Mantz, A. B., Allen, S. W., Morris, R. G., von der Linden, A., Applegate, D. E., Kelly, P. L., Burke, D. L., Donovan, D., Ebeling, H.  
2016; 463 (4): 3582-3603
- **COSMOLOGICAL CONSTRAINTS FROM GALAXY CLUSTERS IN THE 2500 SQUARE-DEGREE SPT-SZ SURVEY** *ASTROPHYSICAL JOURNAL*

- De Haan, T., Benson, B. A., Bleem, L. E., Allen, S. W., APPELATE, D. E., Ashby, M. L., Bautz, M., Bayliss, M., Bocquet, S., Brodwin, M., Carlstrom, J. E., Chang, C. L., Chiu, et al  
2016; 832 (1)
- **SPT-GMOS: A GEMINI/GMOS-SOUTH SPECTROSCOPIC SURVEY OF GALAXY CLUSTERS IN THE SPT-SZ SURVEY** *ASTROPHYSICAL JOURNAL SUPPLEMENT SERIES*  
Bayliss, M. B., Ruel, J., Stubbs, C. W., Allen, S. W., APPELATE, D. E., Ashby, M. L., Bautz, M., Benson, B. A., Bleem, L. E., Bocquet, S., Brodwin, M., Capasso, R., Carlstrom, et al  
2016; 227 (1)
  - **Cosmology and astrophysics from relaxed galaxy clusters - V. Consistency with cold dark matter structure formation** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Mantz, A. B., Allen, S. W., Morris, R. G.  
2016; 462 (1): 681-688
  - **Deep Chandra study of the truncated cool core of the Ophiuchus cluster** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Werner, N., Zhuravleva, I., Canning, R. E., Allen, S. W., King, A. L., Sanders, J. S., Simionescu, A., Taylor, G. B., Morris, R. G., Fabian, A. C.  
2016; 460 (3): 2752-2764
  - **The quiescent intracluster medium in the core of the Perseus cluster** *NATURE*  
Aharonian, F., Akamatsu, H., Akimoto, F., Allen, S. W., Anabuki, N., Angelini, L., Arnaud, K., Audard, M., Awaki, H., Axelsson, M., Bamba, A., Bautz, M., Blandford, et al  
2016; 535 (7610): 117-?
  - **Suzaku observations of a shock front tracing the western edge of the giant radio halo in the Coma Cluster** *PUBLICATIONS OF THE ASTRONOMICAL SOCIETY OF JAPAN*  
Uchida, Y., Simionescu, A., Takahashi, T., Werner, N., Ichinohe, Y., Allen, S. W., Urban, O., Matsushita, K.  
2016; 68
  - **The nature and energetics of AGN-driven perturbations in the hot gas in the Perseus Cluster** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Zhuravleva, I., Churazov, E., Arevalo, P., Schekochihin, A. A., Forman, W. R., Allen, S. W., Simionescu, A., Sunyaev, R., Vikhlinin, A., Werner, N.  
2016; 458 (3): 2902-2915
  - **Cosmology and astrophysics from relaxed galaxy clusters - IV. Robustly calibrating hydrostatic masses with weak lensing** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Applegate, D. E., Mantz, A., Allen, S. W., Von der Linden, A., Morris, R. G., Hilbert, S., Kelly, P. L., Burke, D. L., Ebeling, H., Rapetti, D. A., SCHMIDT, R. W.  
2016; 457 (2): 1522-1534
  - **Cosmology and astrophysics from relaxed galaxy clusters - III. Thermodynamic profiles and scaling relations** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Mantz, A. B., Allen, S. W., Morris, R. G., SCHMIDT, R. W.  
2016; 456 (4): 4020-4039
  - **STAR-FORMING BRIGHTEST CLUSTER GALAXIES AT  $0.25 < z < 1.25$ : A TRANSITIONING FUEL SUPPLY** *ASTROPHYSICAL JOURNAL*  
McDonald, M., Stalder, B., Bayliss, M., Allen, S. W., APPELATE, D. E., Ashby, M. L., Bautz, M., Benson, B. A., Bleem, L. E., Brodwin, M., Carlstrom, J. E., Chiu, I., Desai, et al  
2016; 817 (2)
  - **Deep Chandra observation and numerical studies of the nearest cluster cold front in the sky** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Werner, N., ZuHone, J. A., Zhuravleva, I., Ichinohe, Y., Simionescu, A., Allen, S. W., Markevitch, M., Fabian, A. C., Keshet, U., Roediger, E., Ruszkowski, M., Sanders, J. S.  
2016; 455 (1): 846-858
  - **A UNIFORM CONTRIBUTION OF CORE-COLLAPSE AND TYPE Ia SUPERNOVAE TO THE CHEMICAL ENRICHMENT PATTERN IN THE OUTSKIRTS OF THE VIRGO CLUSTER** *ASTROPHYSICAL JOURNAL LETTERS*  
Simionescu, A., Werner, N., Urban, O., Allen, S. W., Ichinohe, Y., Zhuravleva, I.  
2015; 811 (2)
  - **A Suzaku search for dark matter emission lines in the X-ray brightest galaxy clusters** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Urban, O., Werner, N., Allen, S. W., Simionescu, A., Kaastra, J. S., Strigari, L. E.

2015; 451 (3): 2447-2461

- **New constraints on  $f(R)$  gravity from clusters of galaxies** *PHYSICAL REVIEW D*  
Cataneo, M., Rapetti, D., Schmidt, F., Mantz, A. B., Allen, S. W., Applegate, D. E., Kelly, P. L., von der Linden, A., Morris, R. G.  
2015; 92 (4)
- **Gas density fluctuations in the Perseus Cluster: clumping factor and velocity power spectrum** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Zhuravleva, I., Churazov, E., Arevalo, P., Schekochihin, A. A., Allen, S. W., Fabian, A. C., Forman, W. R., Sanders, J. S., Simionescu, A., Sunyaev, R., Vikhlinin, A., Werner, N.  
2015; 450 (4): 4184-4197
- **A MEASUREMENT OF GRAVITATIONAL LENSING OF THE COSMIC MICROWAVE BACKGROUND BY GALAXY CLUSTERS USING DATA FROM THE SOUTH POLE TELESCOPE** *ASTROPHYSICAL JOURNAL*  
Baxter, E. J., Keisler, R., Dodelson, S., Aird, K. A., Allen, S. W., Ashby, M. L., Bautz, M., Bayliss, M., Benson, B. A., Bleem, L. E., Bocquet, S., Brodwin, M., Carlstrom, et al  
2015; 806 (2)
- **X-RAY CAVITIES IN A SAMPLE OF 83 SPT-SELECTED CLUSTERS OF GALAXIES: TRACING THE EVOLUTION OF AGN FEEDBACK IN CLUSTERS OF GALAXIES OUT TO  $z=1.2$**  *ASTROPHYSICAL JOURNAL*  
Hlavacek-Larrondo, J., McDonald, M., Benson, B. A., Forman, W. R., Allen, S. W., Bleem, L. E., Ashby, M. L., Bocquet, S., Brodwin, M., Dietrich, J. P., Jones, C., Liu, J., Reichardt, et al  
2015; 805 (1)
- **Cosmology and astrophysics from relaxed galaxy clusters - I. Sample selection** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Mantz, A. B., Allen, S. W., Morris, R. G., Schmidt, R. W., von der Linden, A., Urban, O.  
2015; 449 (1): 199-219
- **The growth of the galaxy cluster Abell 85: mergers, shocks, stripping and seeding of clumping** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Ichinohe, Y., Werner, N., Simionescu, A., Allen, S. W., Canning, R. E., Ehlert, S., Mernier, F., Takahashi, T.  
2015; 448 (3): 2971-2986
- **Spectroscopic needs for imaging dark energy experiments** *ASTROPARTICLE PHYSICS*  
Newman, J. A., Abate, A., Abdalla, F. B., Allam, S., Allen, S. W., Ansar, R., Baile, S., Barkhouse, W. A., Beers, T. C., Blanton, M. R., Brodwin, M., Brownstein, J. R., Brunner, et al  
2015; 63: 81-100
- **Distance probes of dark energy** *ASTROPARTICLE PHYSICS*  
Kim, A. G., Padmanabhan, N., Aldering, G., Allen, S. W., Baltay, C., Cahn, R. N., D'Andrea, C. B., Dalai, N., Dawson, K. S., Denney, K. D., Eisenstein, D. J., Finley, D. A., Freedman, et al  
2015; 63: 2-22
- **GALAXY CLUSTERS DISCOVERED VIA THE SUNYAEV-ZEL'DOVICH EFFECT IN THE 2500-SQUARE-DEGREE SPT-SZ SURVEY** *ASTROPHYSICAL JOURNAL SUPPLEMENT SERIES*  
Bleem, L. E., Stalder, B., De Haan, T., Aird, K. A., Allen, S. W., APPLEGATE, D. E., Ashby, M. L., Bautz, M., Bayliss, M., Benson, B. A., Bocquet, S., Brodwin, M., Carlstrom, et al  
2015; 216 (2)
- **Weighing the giants - IV. Cosmology and neutrino mass** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Mantz, A. B., von der Linden, A., Allen, S. W., Applegate, D. E., Kelly, P. L., Morris, R. G., Rapetti, D. A., Schmidt, R. W., Adhikari, S., Allen, M. T., Burchat, P. R., Burke, D. L., Cataneo, et al  
2015; 446 (3): 2205-2225
- **X-ray bright active galactic nuclei in massive galaxy clusters - III. New insights into the triggering mechanisms of cluster AGN** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Ehlert, S., Allen, S. W., Brandt, W. N., Canning, R. E., Luo, B., Mantz, A., Morris, R. G., Von der Linden, A., Xue, Y. Q.  
2015; 446 (3): 2709-2729
- **Turbulent heating in galaxy clusters brightest in X-rays** *NATURE*  
Zhuravleva, I., Churazov, E., Schekochihin, A. A., Allen, S. W., Arevalo, P., Fabian, A. C., Forman, W. R., Sanders, J. S., Simionescu, A., Sunyaev, R., Vikhlinin, A., Werner, N.

2014; 515 (7525): 85-?

- **THE REDSHIFT EVOLUTION OF THE MEAN TEMPERATURE, PRESSURE, AND ENTROPY PROFILES IN 80 SPT-SELECTED GALAXY CLUSTERS** *ASTROPHYSICAL JOURNAL*  
McDonald, M., Benson, B. A., Vikhlinin, A., Aird, K. A., Allen, S. W., Bautz, M., Bayliss, M., Bleem, L. E., Bocquet, S., Brodwin, M., Carlstrom, J. E., Chang, C. L., Cho, et al  
2014; 794 (1)
- **Robust weak-lensing mass calibration of Planck galaxy clusters** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
von der Linden, A., Mantz, A., Allen, S. W., Applegate, D. E., Kelly, P. L., Morris, R. G., Wright, A., Allen, M. T., Burchat, P. R., Burke, D. L., Donovan, D., Ebeling, H.  
2014; 443 (3): 1973-1978
- **THE RELATION BETWEEN GAS DENSITY AND VELOCITY POWER SPECTRA IN GALAXY CLUSTERS: QUALITATIVE TREATMENT AND COSMOLOGICAL SIMULATIONS** *ASTROPHYSICAL JOURNAL LETTERS*  
Zhuravleva, I., Churazov, E. M., Schekochihin, A. A., Lau, E. T., Nagai, D., Gaspari, M., Allen, S. W., Nelson, K., Parrish, I. J.  
2014; 788 (1)
- **Cosmology and astrophysics from relaxed galaxy clusters - II. Cosmological constraints** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Mantz, A. B., Allen, S. W., Morris, R. G., Rapetti, D. A., APPLGATE, D. E., Kelly, P. L., Von der Linden, A., SCHMIDT, R. W.  
2014; 440 (3): 2077-2098
- **MEASURING THE STELLAR MASSES OF  $z$  similar to 7 GALAXIES WITH THE SPITZER ULTRAFAINTE SURVEY PROGRAM (SURFS UP)** *ASTROPHYSICAL JOURNAL LETTERS*  
Ryan, R. E., Gonzalez, A. H., Lemaux, B. C., Bradac, M., Casertano, S., Allen, S., Cain, B., Gladders, M., Hall, N., Hildebrandt, H., Hinz, J., Huang, K., Lubin, et al  
2014; 786 (1)
- **SPITZER ULTRA FAINT SURVEY PROGRAM (SURFS UP). I. AN OVERVIEW** *ASTROPHYSICAL JOURNAL*  
Bradac, M., Ryan, R., Casertano, S., Huang, K., Lemaux, B. C., Schrabback, T., Gonzalez, A. H., Allen, S., Cain, B., Gladders, M., Hall, N., Hildebrandt, H., Hinz, et al  
2014; 785 (2)
- **The origin of cold gas in giant elliptical galaxies and its role in fuelling radio-mode AGN feedback** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Werner, N., Oonk, J. B., Sun, M., Nulsen, P. E., Allen, S. W., Canning, R. E., Simionescu, A., Hoffer, A., Connor, T., Donahue, M., Edge, A. C., Fabian, A. C., Von der Linden, et al  
2014; 439 (3): 2291-2306
- **Weighing the Giants - II. Improved calibration of photometry from stellar colours and accurate photometric redshifts** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Kelly, P. L., von der Linden, A., Applegate, D. E., Allen, M. T., Allen, S. W., Burchat, P. R., Burke, D. L., Ebeling, H., Capak, P., Czoske, O., Donovan, D., Mantz, A., Morris, et al  
2014; 439 (1): 28-47
- **Weighing the Giants - III. Methods and measurements of accurate galaxy cluster weak-lensing masses** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Applegate, D. E., von der Linden, A., Kelly, P. L., Allen, M. T., Allen, S. W., Burchat, P. R., Burke, D. L., Ebeling, H., Mantz, A., Morris, R. G.  
2014; 439 (1): 48-72
- **Weighing the Giants - I. Weak-lensing masses for 51 massive galaxy clusters: project overview, data analysis methods and cluster images** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
von der Linden, A., Allen, M. T., Applegate, D. E., Kelly, P. L., Allen, S. W., Ebeling, H., Burchat, P. R., Burke, D. L., Donovan, D., Morris, R. G., Blandford, R., Erben, T., Mantz, et al  
2014; 439 (1): 2-27
- **Azimuthally resolved X-ray spectroscopy to the edge of the Perseus Cluster** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Urban, O., Simionescu, A., Werner, N., Allen, S. W., Ehlert, S., Zhuravleva, I., Morris, R. G., Fabian, A. C., Mantz, A., Nulsen, P. E., Sanders, J. S., Takei, Y.  
2014; 437 (4): 3939-3961
- **X-ray bright active galactic nuclei in massive galaxy clusters - II. The fraction of galaxies hosting active nuclei** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Ehlert, S., Von der Linden, A., Allen, S. W., Brandt, W. N., Xue, Y. Q., Luo, B., Mantz, A., Morris, R. G., Applegate, D., Kelly, P.



2014; 437 (2): 1942-1949

- **PROBING THE EXTREME REALM OF ACTIVE GALACTIC NUCLEUS FEEDBACK IN THE MASSIVE GALAXY CLUSTER, RX J1532.9+3021** *ASTROPHYSICAL JOURNAL*  
Hlavacek-Larrondo, J., Allen, S. W., Taylor, G. B., Fabian, A. C., Canning, R. E., Werner, N., Sanders, J. S., GRIMES, C. K., Ehlert, S., Von der Linden, A.  
2013; 777 (2)
- **Resonant scattering in the Perseus Cluster: spectral model for constraining gas motions with Astro-H** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Zhuravleva, I., Churazov, E., Sunyaev, R., Sazonov, S., Allen, S. W., Werner, N., Simionescu, A., KONAMI, S., Ohashi, T.  
2013; 435 (4): 3111-3121
- **A uniform metal distribution in the intergalactic medium of the Perseus cluster of galaxies.** *Nature*  
Werner, N., Urban, O., Simionescu, A., Allen, S. W.  
2013; 502 (7473): 656-658
- **A uniform metal distribution in the intergalactic medium of the Perseus cluster of galaxies.** *Nature*  
Werner, N., Urban, O., Simionescu, A., Allen, S. W.  
2013; 502 (7473): 656-658
- **A multiwavelength view of cooling versus AGN heating in the X-ray luminous cool-core of Abell 3581** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Canning, R. E., Sun, M., Sanders, J. S., Clarke, T. E., Fabian, A. C., Giacintucci, S., Lal, D. V., Werner, N., Allen, S. W., Donahue, M., Edge, A. C., Johnstone, R. M., Nulsen, et al  
2013; 435 (2): 1108-1125
- **THERMODYNAMICS OF THE COMA CLUSTER OUTSKIRTS** *ASTROPHYSICAL JOURNAL*  
Simionescu, A., Werner, N., Urban, O., Allen, S. W., Fabian, A. C., Mantz, A., Matsushita, K., Nulsen, P. E., Sanders, J. S., Sasaki, T., Sato, T., Takei, Y., Walker, et al  
2013; 775 (1)
- **X-ray cluster constraints on non-Gaussianity** *JOURNAL OF COSMOLOGY AND ASTROPARTICLE PHYSICS*  
Shandera, S., Mantz, A., Rapetti, D., Allen, S. W.  
2013
- **A combined measurement of cosmic growth and expansion from clusters of galaxies, the CMB and galaxy clustering** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Rapetti, D., Blake, C., Allen, S. W., Mantz, A., Parkinson, D., Beutler, F.  
2013; 432 (2): 973-985
- **The rapid evolution of AGN feedback in brightest cluster galaxies: switching from quasar-mode to radio-mode feedback** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Hlavacek-Larrondo, J., Fabian, A. C., Edge, A. C., Ebeling, H., Allen, S. W., Sanders, J. S., Taylor, G. B.  
2013; 431 (2): 1638-1658
- **THE NATURE OF FILAMENTARY COLD GAS IN THE CORE OF THE VIRGO CLUSTER** *ASTROPHYSICAL JOURNAL*  
Werner, N., Oonk, J. B., Canning, R. E., Allen, S. W., Simionescu, A., Kos, J., van Weeren, R. J., Edge, A. C., Fabian, A. C., Von der Linden, A., Nulsen, P. E., Reynolds, C. S., Ruszkowski, et al  
2013; 767 (2)
- **Ripping apart at the seams: the network of stripped gas surrounding M86** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Ehlert, S., Werner, N., Simionescu, A., Allen, S. W., Kenney, J. D., Million, E. T., Finoguenov, A.  
2013; 430 (3): 2401-2410
- **X-ray bright active galactic nuclei in massive galaxy clusters - I. Number counts and spatial distribution** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Ehlert, S., Allen, S. W., Brandt, W. N., Xue, Y. Q., Luo, B., Von der Linden, A., Mantz, A., Morris, R. G.  
2013; 428 (4): 3509-3525
- **REGULATION OF BLACK HOLE WINDS AND JETS ACROSS THE MASS SCALE** *ASTROPHYSICAL JOURNAL*  
King, A. L., MILLER, J. M., Raymond, J., Fabian, A. C., Reynolds, C. S., Gueltekin, K., Cackett, E. M., Allen, S. W., Proga, D., Kallman, T. R.

2013; 762 (2)

- **LARGE-SCALE MOTIONS IN THE PERSEUS GALAXY CLUSTER** *ASTROPHYSICAL JOURNAL*  
Simionescu, A., Werner, N., Urban, O., Allen, S. W., Fabian, A. C., Sanders, J. S., Mantz, A., Nulsen, P. E., Takei, Y.  
2012; 757 (2)
- **On the thermodynamic self-similarity of the nearest, most relaxed, giant ellipticals** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Werner, N., Allen, S. W., Simionescu, A.  
2012; 425 (4): 2731-2740
- **Baryons in the outskirts of the X-ray brightest galaxy cluster** *Conference on Exploring the X-ray Universe - Suzaku and Beyond (SUZAKU)*  
Simionescu, A., Allen, S. W., Mantz, A., Werner, N., Takei, Y.  
AMER INST PHYSICS.2012
- **A wide Chandra view of the core of the Perseus cluster** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Fabian, A. C., Sanders, J. S., Allen, S. W., Canning, R. E., Churazov, E., Crawford, C. S., Forman, W., Gabany, J., Hlavacek-Larrondo, J., Johnstone, R. M., Russell, H. R., Reynolds, C. S., Salome, et al  
2011; 418 (4): 2154-2164
- **Core-collapse supernova enrichment in the core of the Virgo cluster** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Million, E. T., Werner, N., Simionescu, A., Allen, S. W.  
2011; 418 (4): 2744-2753
- **Violent interaction between the active galactic nucleus and the hot gas in the core of the galaxy cluster Sersic 159-03** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Werner, N., Sun, M., Bagchi, J., Allen, S. W., Taylor, G. B., Sirothia, S. K., Simionescu, A., Million, E. T., JACOB, J., Donahue, M.  
2011; 415 (4): 3369-3379
- **X-ray spectroscopy of the Virgo Cluster out to the virial radius** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Urban, O., Werner, N., Simionescu, A., Allen, S. W., Boehringer, H.  
2011; 414 (3): 2101-2111
- **Baryons at the Edge of the X-ray-Brightest Galaxy Cluster** *SCIENCE*  
Simionescu, A., Allen, S. W., Mantz, A., Werner, N., Takei, Y., Morris, R. G., Fabian, A. C., Sanders, J. S., Nulsen, P. E., George, M. R., Taylor, G. B.  
2011; 331 (6024): 1576-1579
- **Extreme active galactic nucleus feedback and cool-core destruction in the X-ray luminous galaxy cluster MACS J1931.8-2634** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Ehler, S., Allen, S. W., Von der Linden, A., Simionescu, A., Werner, N., Taylor, G. B., Gentile, G., Ebeling, H., Allen, M. T., Applegate, D., Dunn, R. J., Fabian, A. C., Kelly, et al  
2011; 411 (3): 1641-1658
- **Testing General Relativity on Cosmic Scales with the Observed Abundance of Massive Clusters** *PROGRESS OF THEORETICAL PHYSICS SUPPLEMENT*  
Rapetti, D., Allen, S. W., Mantz, A., Ebeling, H.  
2011: 179-187
- **Cosmological Parameters from Observations of Galaxy Clusters** *ANNUAL REVIEW OF ASTRONOMY AND ASTROPHYSICS, VOL 49*  
Allen, S. W., Evrard, A. E., Mantz, A. B.  
2011; 49: 409-470
- **HIGH-REDSHIFT X-RAY COOLING-CORE CLUSTER ASSOCIATED WITH THE LUMINOUS RADIO-LOUD QUASAR 3C 186** *ASTROPHYSICAL JOURNAL*  
Siemiginowska, A., Burke, D. J., Aldcroft, T. L., Worrall, D. M., Allen, S., Bechtold, J., Clarke, T., Cheung, C. C.  
2010; 722 (1): 102-111
- **Feedback under the microscope - I. Thermodynamic structure and AGN-driven shocks in M87** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Million, E. T., Werner, N., Simionescu, A., Allen, S. W., Nulsen, P. E., Fabian, A. C., Boehringer, H., Sanders, J. S.  
2010; 407 (4): 2046-2062
- **Feedback under the microscope - II. Heating, gas uplift and mixing in the nearest cluster core** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*

- 
- Werner, N., Simionescu, A., Million, E. T., Allen, S. W., Nulsen, P. E., Von der Linden, A., Hansen, S. M., Boehringer, H., Churazov, E., Fabian, A. C., Forman, W. R., Jones, C., Sanders, et al  
2010; 407 (4): 2063-2074
- **The observed growth of massive galaxy clusters - III. Testing general relativity on cosmological scales** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Rapetti, D., Allen, S. W., Mantz, A., Ebeling, H.  
2010; 406 (3): 1796-1804
  - **The observed growth of massive galaxy clusters - IV. Robust constraints on neutrino properties** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Mantz, A., Allen, S. W., Rapetti, D.  
2010; 406 (3): 1805-1814
  - **The observed growth of massive galaxy clusters - II. X-ray scaling relations** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Mantz, A., Allen, S. W., Ebeling, H., Rapetti, D., Drlica-Wagner, A.  
2010; 406 (3): 1773-1795
  - **The observed growth of massive galaxy clusters - I. Statistical methods and cosmological constraints** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Mantz, A., Allen, S. W., Rapetti, D., Ebeling, H.  
2010; 406 (3): 1759-1772
  - **Herschel photometry of brightest cluster galaxies in cooling flow clusters** *ASTRONOMY & ASTROPHYSICS*  
Edge, A. C., Oonk, J. B., Mittal, R., Allen, S. W., Baum, S. A., Boehringer, H., Bregman, J. N., Bremer, M. N., Combes, F., Crawford, C. S., Donahue, M., Egami, E., Fabian, et al  
2010; 518
  - **Ram-pressure stripping of the cool core of the Ophiuchus Cluster** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Million, E. T., Allen, S. W., Werner, N., Taylor, G. B.  
2010; 405 (3): 1624-1633
  - **Herschel observations of FIR emission lines in brightest cluster galaxies** *ASTRONOMY & ASTROPHYSICS*  
Edge, A. C., Oonk, J. B., Mittal, R., Allen, S. W., Baum, S. A., Boehringer, H., Bregman, J. N., Bremer, M. N., Combes, F., Crawford, C. S., Donahue, M., Egami, E., Fabian, et al  
2010; 518
  - **The radio properties of a complete, X-ray selected sample of nearby, massive elliptical galaxies** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Dunn, R. J., Allen, S. W., Taylor, G. B., Shurkin, K. F., Gentile, G., Fabian, A. C., Reynolds, C. S.  
2010; 404 (1): 180-197
  - **The ASTRO-H Mission** *Conference on Space Telescopes and Instrumentation 2010 - Ultraviolet to Gamma Ray*  
Takahashi, T., Mitsuda, K., Kelley, R., Aharonian, F., Akimoto, F., Allen, S., Anabuki, N., Angelini, L., Arnaud, K., Awaki, H., Bamba, A., Bando, N., Bautz, et al  
SPIE-INT SOC OPTICAL ENGINEERING.2010
  - **CONSTRAINING DARK ENERGY AND GRAVITY WITH X-RAY GALAXY CLUSTERS** *7th International Heidelberg Conference on Dark Matter in Astrophysics and Particle Physics (DARK 2009)*  
Rapetti, D., Allen, S. W., Mantz, A., Morris, R. G., Ebeling, H., Schmidt, R., Fabian, A. C.  
WORLD SCIENTIFIC PUBL CO PTE LTD.2010: 426-439
  - **Constraints on turbulent pressure in the X-ray halos of giant elliptical galaxies from resonant scattering** *27th IAU General Assembly*  
Werner, N., Zhuravleva, I., Churazov, E., Simionescu, A., Allen, S. W., Forman, W., Jones, C., Kaastra, J.  
CAMBRIDGE UNIV PRESS.2010: 297-297
  - **Constraints on modified gravity from the observed X-ray luminosity function of galaxy clusters** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Rapetti, D., Allen, S. W., Mantz, A., Ebeling, H.  
2009; 400 (2): 699-704
  - **Chandra measurements of non-thermal-like X-ray emission from massive, merging, radio halo clusters** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*
-

- Million, E. T., Allen, S. W.  
2009; 399 (3): 1307-1327
- **Constraints on turbulent pressure in the X-ray haloes of giant elliptical galaxies from resonant scattering** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Werner, N., Zhuravleva, I., Churazov, E., Simionescu, A., Allen, S. W., Forman, W., Jones, C., Kaastra, J. S.  
2009; 398 (1): 23-32
  - **Revealing the magnetic field in a distant galaxy cluster: discovery of the complex radio emission from MACS J0717.5+3745** *ASTRONOMY & ASTROPHYSICS*  
Bonafede, A., Feretti, L., Giovannini, G., Govoni, F., Murgia, M., Taylor, G. B., Ebeling, H., Allen, S., Gentile, G., Pihlstrom, Y.  
2009; 503 (3): 707-720
  - **CONSTRAINING GRAVITY AT LARGE SCALES WITH X-RAY GALAXY CLUSTER STUDIES** *Conference on Dark Energy, Dark Matter - Observation, Experiments and Theories*  
Rapetti, D., Allen, S. W., Mantz, A., Ebeling, H., Schmidt, R., Morris, R. G., Fabian, A. C.  
E D P SCIENCES.2009: 149-151
  - **REVEALING THE PROPERTIES OF DARK MATTER IN THE MERGING CLUSTER MACS J0025.4-1222** *ASTROPHYSICAL JOURNAL*  
Bradac, M., Allen, S. W., Treu, T., Ebeling, H., Massey, R., Morris, R. G., von der Linden, A., Applegate, D.  
2008; 687 (2): 959-967
  - **The prospects for constraining dark energy with future X-ray cluster gas mass fraction measurements** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Rapetti, D., Allen, S. W., Mantz, A.  
2008; 388 (3): 1265-1278
  - **New constraints on dark energy from the observed growth of the most X-ray luminous galaxy clusters** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Mantz, A., Allen, S. W., Ebeling, H., Rapetti, D.  
2008; 387 (3): 1179-1192
  - **Dark matter and baryons in the X-ray luminous merging galaxy cluster RX J1347.5-1145** *ASTROPHYSICAL JOURNAL*  
Bradac, M., Schrabback, T., Erben, T., McCourt, M., Million, E., Mantz, A., Allen, S., Blandford, R., Halkola, A., Hildebrandt, H., Lombardi, M., Marshall, P., Schneider, et al  
2008; 681 (1): 187-196
  - **Cool X-ray emitting gas in the core of the Centaurus cluster of galaxies** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Sanders, J. S., Fabian, A. C., Allen, S. W., Morris, R. G., Graham, J., Johnstone, R. M.  
2008; 385 (3): 1186-1200
  - **Active galactic nuclei-induced cavities in NGC 1399 and NGC 4649** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Shurkin, K., Dunn, R. J., Gentile, G., Taylor, G. B., Allen, S. W.  
2008; 383 (3): 923-930
  - **Improved constraints on dark energy from Chandra X-ray observations of the largest relaxed galaxy clusters** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Allen, S. W., Rapetti, D. A., SCHMIDT, R. W., Ebeling, H., Morris, R. G., Fabian, A. C.  
2008; 383 (3): 879-896
  - **Wide field X-ray telescope mission** *Conference on Space Telescopes and Instrumentation 2008 - Ultraviolet to Gamma Ray*  
Murray, S. S., Norman, C., Ptak, A., Giacconi, R., Weisskopf, M., Ramsey, B., Bautz, M., Vikhlinin, A., Brandt, N., Rosati, P., Weaver, H., Allen, S., Flanagan, et al  
SPIE-INT SOC OPTICAL ENGINEERING.2008
  - **Fields and filaments in the core of the Centaurus cluster** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Taylor, G. B., Fabian, A. C., Gentile, G., Allen, S. W., Crawford, C., Sanders, J. S.  
2007; 382 (1): 67-72
  - **The dark matter haloes of massive, relaxed galaxy clusters observed with Chandra** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Schmidt, R. W., Allen, S. W.

2007; 379 (1): 209-221

- **Monitoring the bidirectional relativistic jets of the radio galaxy 3C 338** *ASTROPHYSICAL JOURNAL*  
Gentile, G., Rodriguez, C., Taylor, G. B., Giovannini, G., Allen, S. W., Lane, W. M., Kassim, N. E.  
2007; 659 (1): 225-234
- **A kinematical approach to dark energy studies** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Rapetti, D., Allen, S. W., Amin, M. A., Blandford, R. D.  
2007; 375 (4): 1510-1520
- **The relation between accretion rate and jet power in X-ray luminous elliptical galaxies** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Allen, S. W., Dunn, R. J., Fabian, A. C., Taylor, G. B., Reynolds, C. S.  
2006; 372 (1): 21-30
- **Fe emission and ionized excess absorption in the luminous quasar 3C 109 with XMM-Newton** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Miniutti, G., Ballantyne, D. R., Allen, S. W., Fabian, A. C., Ross, R. R.  
2006; 371 (1): 283-292
- **Magnetic fields in the centre of the Perseus cluster** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Taylor, G. B., Gugliucci, N. E., Fabian, A. C., Sanders, J. S., Gentile, G., Allen, S. W.  
2006; 368 (4): 1500-1506
- **A very deep Chandra observation of the Perseus cluster: shocks, ripples and conduction** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Fabian, A. C., Sanders, J. S., Taylor, G. B., Allen, S. W., Crawford, C. S., Johnstone, R. M., Iwasawa, K.  
2006; 366 (2): 417-428
- **The low-power nucleus of PKS 1246-410 in the Centaurus cluster** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Taylor, G. B., Sanders, J. S., Fabian, A. C., Allen, S. W.  
2006; 365 (3): 705-711
- **Magnetic fields in the center of the Perseus Cluster** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
B., T. G., E., G. N., C., F. A., S., S. J., G., G., W., A. S.  
2006; 368: 1500 - 1506
- **Constraining dark energy with X-ray galaxy clusters, supernovae and the cosmic microwave background** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Rapetti, D., Allen, S. W., Weller, J.  
2005; 360 (2): 555-564
- **A deep Chandra observation of the Centaurus cluster: bubbles, filaments and edges** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Fabian, A. C., Sanders, J. S., Taylor, G. B., Allen, S. W.  
2005; 360 (1): L20-L24
- **The prevalence of cooling cores in clusters of galaxies at z approximate to 0.15-0.4** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Bauer, F. E., Fabian, A. C., Sanders, J. S., Allen, S. W., Johnstone, R. A.  
2005; 359 (4): 1481-1490
- **VLA polarimetry observations of PKS 2322-123: estimating magnetic fields in the Abell 2597 cluster** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Pollack, L. K., Taylor, G. B., Allen, S. W.  
2005; 359 (4): 1229-1236
- **Constraints on dark energy from Chandra observations of the largest relaxed galaxy clusters** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Allen, S. W., SCHMIDT, R. W., Ebeling, H., Fabian, A. C., Van Speybroeck, L.  
2004; 353 (2): 457-467
- **An improved approach to measuring H-0 using X-ray and SZ observations of galaxy clusters** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Schmidt, R. W., Allen, S. W., Fabian, A. C.

2004; 352 (4): 1413-1420

- **Mapping small-scale temperature and abundance structures in the core of the Perseus cluster** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Sanders, J. S., Fabian, A. C., Allen, S. W., Schmidt, R. W.  
2004; 349 (3): 952-972
- **A unique small-scale gravitational arc in A1201** *ASTROPHYSICAL JOURNAL*  
Edge, A. C., Smith, G. P., Sand, D. J., Treu, T., Ebeling, H., Allen, S. W., Van Dokkum, P. G.  
2003; 599 (2): L69-L72
- **A preference for a non-zero neutrino mass from cosmological data** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Allen, S. W., SCHMIDT, R. W., Bridle, S. L.  
2003; 346 (2): 593-600
- **A deep Chandra observation of the Perseus cluster: shocks and ripples** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Fabian, A. C., Sanders, J. S., Allen, S. W., Crawford, C. S., Iwasawa, K., Johnstone, R. M., SCHMIDT, R. W., Taylor, G. B.  
2003; 344 (3): L43-U2
- **Cosmological constraints from the local X-ray luminosity function of the most X-ray-luminous galaxy clusters** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Allen, S. W., SCHMIDT, R. W., Fabian, A. C., Ebeling, H.  
2003; 342 (1): 287-298
- **Chandra observations of the galaxy cluster A478: The interaction of hot gas and radio plasma in the core, and an improved determination of the compton  $\gamma$ -parameter** *ASTROPHYSICAL JOURNAL*  
Sun, M., Jones, C., Murray, S. S., Allen, S. W., Fabian, A. C., Edge, A. C.  
2003; 587 (2): 619-624
- **Accretion onto the supermassive black hole in M87** *ASTROPHYSICAL JOURNAL*  
Di Matteo, T., Allen, S. W., Fabian, A. C., Wilson, A. S., Young, A. J.  
2003; 582 (1): 133-140
- **X-rays from clusters of galaxies** *21st Texas Symposium on Relativistic Astrophysics*  
Fabian, A. C., Allen, S. W.  
WORLD SCIENTIFIC PUBL CO PTE LTD.2003: 197-208
- **The peculiar cooling flow cluster RX J0820.9+0752** *Conference on Matter and Energy in Clusters of Galaxies*  
Bayer-Kim, C. M., Crawford, C. S., Allen, S. W., Fabian, A. C., Edge, A. C.  
ASTRONOMICAL SOC PACIFIC.2003: 437-441
- **Mapping small-scale temperature and abundance structures in the core of the Perseus cluster** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
S, S. J., C, F. A., W, A. S., W, S. R.  
2003; 349: 952 - 972
- **The peculiar cooling flow cluster RX j0820.9+0752** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Bayer-Kim, C. M., Crawford, C. S., Allen, S. W., Edge, A. C., Fabian, A. C.  
2002; 337 (3): 938-952
- **A survey of molecular hydrogen in the central galaxies of cooling flows** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Edge, A. C., Wilman, R. J., Johnstone, R. M., Crawford, C. S., Fabian, A. C., Allen, S. W.  
2002; 337 (1): 49-62
- **Exciting molecular hydrogen in the central galaxies of cooling flows** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Wilman, R. J., Edge, A. C., Johnstone, R. M., Fabian, A. C., Allen, S. W., Crawford, C. S.  
2002; 337 (1): 63-70
- **Chandra observations of Abell 2199** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Johnstone, R. M., Allen, S. W., Fabian, A. C., Sanders, J. S.  
2002; 336 (1): 299-308

- **Conduction and cooling flows** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Voigt, L. M., SCHMIDT, R. W., Fabian, A. C., Allen, S. W., Johnstone, R. M.  
2002; 335 (1): L7-L11
- **Chandra observations of RX J1347.5-1145: the distribution of mass in the most X-ray-luminous galaxy cluster known** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Allen, S. W., SCHMIDT, R. W., Fabian, A. C.  
2002; 335 (2): 256-266
- **Magnetic fields in the Centaurus cluster** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Taylor, G. B., Fabian, A. C., Allen, S. W.  
2002; 334 (4): 769-776
- **Cosmological constraints from the X-ray gas mass fraction in relaxed lensing clusters observed with Chandra** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Allen, S. W., SCHMIDT, R. W., Fabian, A. C.  
2002; 334 (2): L11-L15
- **The missing soft X-ray luminosity in cluster cooling flows** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Fabian, A. C., Allen, S. W., Crawford, C. S., Johnstone, R. M., Morris, R. G., Sanders, J. S., SCHMIDT, R. W.  
2002; 332 (3): L50-L54
- **Deep inside the core of Abell 1795: the Chandra view** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Ettori, S., Fabian, A. C., Allen, S. W., Johnstone, R. M.  
2002; 331 (3): 635-648
- **The X-ray virial relations for relaxed lensing clusters observed with Chandra** *Workshop on Tracing Cosmic Evolution with Galaxy Clusters*  
Allen, S. W., Schmidt, R. W., Fabian, A. C.  
ASTRONOMICAL SOC PACIFIC.2002: 195-198
- **Chandra and the black hole in M87** *MPA/ESO/MPE/USM Joint Astronomy Conference on Lighthouses of the Universe*  
Di Matteo, T., Allen, S. W., Fabian, A. C., Wilson, A. S., Young, A. J.  
SPRINGER-VERLAG BERLIN.2002: 443-449
- **The X-ray virial relations for relaxed lensing clusters observed with Chandra** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Allen, S. W., SCHMIDT, R. W., Fabian, A. C.  
2001; 328 (3): L37-L41
- **The intracluster iron distribution around 4C+55.16** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Iwasawa, K., Fabian, A. C., Allen, S. W., Ettori, S.  
2001; 328 (1): L5-L10
- **Chandra observations of the galaxy cluster Abell 1835** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
SCHMIDT, R. W., Allen, S. W., Fabian, A. C.  
2001; 327 (4): 1057-1070
- **Magnetic fields in the 3C 129 cluster** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Taylor, G. B., Govoni, F., Allen, S. W., Fabian, A. C.  
2001; 326 (1): 2-10
- **Chandra X-ray observations of the 3C 295 cluster core** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Allen, S. W., Taylor, G. B., Nulsen, P. E., Johnstone, R. M., David, L. P., Ettori, S., Fabian, A. C., Forman, W., Jones, C., McNamara, B.  
2001; 324 (4): 842-858
- **Chandra measurements of the distribution of mass in the luminous lensing cluster Abell 2390** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Allen, S. W., Ettori, S., Fabian, A. C.  
2001; 324 (4): 877-890
- **ASCA and ROSAT observations of nearby cluster cooling flows** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*

- 
- Allen, S. W., Fabian, A. C., Johnstone, R. M., Arnaud, K. A., Nulsen, P. E.  
2001; 322 (3): 589-613
- **Accretion onto nearby supermassive black holes: Chandra constraints on the dominant cluster galaxy NGC 6166** *ASTROPHYSICAL JOURNAL*  
Di Matteo, T., Johnstone, R. M., Allen, S. W., Fabian, A. C.  
2001; 550 (1): L19-L23
  - **BeppoSAX observations of three distant, highly luminous clusters of galaxies: RXJ1347-1145, Zwicky 3146 and Abell 2390** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Ettori, S., Allen, S. W., Fabian, A. C.  
2001; 322 (1): 187-194
  - **Chandra imaging of the X-ray core of Abell 1795** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Fabian, A. C., Sanders, J. S., Ettori, S., Taylor, G. B., Allen, S. W., Crawford, C. S., Iwasawa, K., Johnstone, R. M.  
2001; 321 (2): L33-U1
  - **BeppoSAX observations of very hot cooling-flow clusters of galaxies** *X-Ray Astronomy 2000 Conference*  
Ettori, S., Allen, S. W., Fabian, A. C.  
ASTRONOMICAL SOC PACIFIC.2001: 387-392
  - **A Chandra observation of the radio galaxy 4C+55.16** *Symposium on New Century of X-Ray Astronomy*  
Iwasawa, K., Fabian, A. C., Allen, S. W., Ettori, S.  
ASTRONOMICAL SOC PACIFIC.2001: 108-111
  - **Chandra constraints on the supermassive black hole in NGC 6166** *X-Ray Astronomy 2000 Conference*  
Di Matteo, T., Johnstone, R. M., Allen, S. W., Fabian, A. C.  
ASTRONOMICAL SOC PACIFIC.2001: 517-522
  - **Magnetic fields in the 3C219 cluster** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
B, T. G., F, G., W, A. S., C, F. A.  
2001; 326: 2 - 15
  - **Chandra imaging of the complex X-ray core of the Perseus cluster** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Fabian, A. C., Sanders, J. S., Ettori, S., Taylor, G. B., Allen, S. W., Crawford, C. S., Iwasawa, K., Johnstone, R. M., Ogle, P. M.  
2000; 318 (4): L65-?
  - **X-ray colour maps of the cores of galaxy clusters** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Sanders, J. S., Fabian, A. C., Allen, S. W.  
2000; 318 (3): 733-746
  - **The ROSAT Brightest Cluster Sample - IV. The extended sample** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Ebeling, H., Edge, A. C., Allen, S. W., Crawford, C. S., Fabian, A. C., Huchra, J. P.  
2000; 318 (2): 333-340
  - **A determination of the Hubble constant using measurements of X-ray emission and the Sunyaev-Zeldovich effect at millimeter wavelengths in the cluster Abell 1835** *ASTROPHYSICAL JOURNAL*  
Mauskopf, P. D., Ade, P. A., Allen, S. W., Church, S. E., Edge, A. C., Ganga, K. M., Holzappel, W. L., Lange, A. E., Rownd, B. K., Philhour, B. J., Runyan, M. C.  
2000; 538 (2): 505-516
  - **The properties of cooling flows in X-ray luminous clusters of galaxies** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Allen, S. W.  
2000; 315 (2): 269-295
  - **Testing the connection between the X-ray and submillimetre source populations using Chandra** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Fabian, A. C., Smal, I., Iwasawa, K., Allen, S. W., Blain, A. W., Crawford, C. S., Ettori, S., Ivison, R. J., Johnstone, R. M., Kneib, J. P., Wilman, R. J.  
2000; 315 (1): L8-L12
  - **Low-radiative-efficiency accretion in the nuclei of elliptical galaxies** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Di Matteo, T., Quataert, E., Allen, S. W., Narayan, R., Fabian, A. C.  
2000; 311 (3): 507-521
-



- **Hard X-ray emission from elliptical galaxies** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Allen, S. W., Di Matteo, T., Fabian, A. C.  
2000; 311 (3): 493-506
- **X-ray emission from supermassive black holes in elliptical galaxies and low radiative-efficiency accretion** *195th Symposium of the International-Astronomical-Union*  
Di Matteo, T., Allen, S. W.  
ASTRONOMICAL SOC PACIFIC.2000: 387-88
- **Hard X-ray emission from elliptical galaxies and its contribution to the X-ray background** *ASTROPHYSICAL JOURNAL*  
Di Matteo, T., Allen, S. W.  
1999; 527 (1): L21-L24
- **The ROSAT brightest cluster sample - III. Optical spectra of the central cluster galaxies** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Crawford, C. S., Allen, S. W., Ebeling, H., Edge, A. C., Fabian, A. C.  
1999; 306 (4): 857-896
- **X-ray and lensing results on the cluster around the powerful radio galaxy 4C+55.16** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Iwasawa, K., Allen, S. W., Fabian, A. C., Edge, A. C., Ettori, S.  
1999; 306 (2): 467-472
- **The ROSAT Brightest Cluster Sample - I. The compilation of the sample and the cluster log N log S distribution** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Ebeling, H., Edge, A. C., BOHRINGER, H., Allen, S. W., Crawford, C. S., Fabian, A. C., Voges, W., Huchra, J. P.  
1998; 301 (4): 881-914
- **A ROSAT study of the cores of clusters of galaxies - I. Cooling flows in an X-ray flux-limited sample** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Peres, C. B., Fabian, A. C., Edge, A. C., Allen, S. W., Johnstone, R. M., White, D. A.  
1998; 298 (2): 416-432
- **The relationship between cooling flows and metallicity measurements for X-ray-luminous clusters** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Allen, S. W., Fabian, A. C.  
1998; 297 (3): L63-L68
- **The impact of cooling flows on the T-X-L-Bol relation for the most luminous clusters** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Allen, S. W., Fabian, A. C.  
1998; 297 (3): L57-L62
- **Resolving the discrepancy between X-ray and gravitational lensing mass measurements for clusters of galaxies** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Allen, S. W.  
1998; 296 (2): 392-406
- **The ROSAT Brightest Cluster sample (BCS): The cluster X-ray luminosity function within  $z=0.3$**  *ASTROPHYSICAL JOURNAL*  
Ebeling, H., Edge, A. C., Fabian, A. C., Allen, S. W., Crawford, C. S., BOHRINGER, H.  
1997; 479 (2): L101-L104
- **The spatial distributions of cooling gas and intrinsic X-ray-absorbing material in cooling flows** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Allen, S. W., Fabian, A. C.  
1997; 286 (3): 583-603
- **The ASCA X-ray spectrum of the powerful radio galaxy 3C 109** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Allen, S. W., Fabian, A. C., Idesawa, E., Inoue, H., Kii, T., Otani, C.  
1997; 286 (3): 765-770
- **Cooling flows in ROSAT observations of clusters of galaxies** *Meeting on Galactic and Cluster Cooling Flows*  
Peres, C. B., Allen, S. W., Edge, A. C., Fabian, A. C., Johnstone, R. M., White, D. A.

---

ASTRONOMICAL SOC PACIFIC.1997: 157-164

- **X-ray observations of cooling flow clusters** *Meeting on Galactic and Cluster Cooling Flows*  
Allen, S. W., Fabian, A. C.  
ASTRONOMICAL SOC PACIFIC.1997: 1-10
- **ASCA and ROSAT observations of distant, massive cooling flows** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Allen, S. W., Fabian, A. C., Edge, A. C., Bautz, M. W., Furuzawa, A., Tawara, Y.  
1996; 283 (1): 263-281
- **A combined X-ray and gravitational lensing study of the massive cooling-flow cluster PKS 0745-191** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Allen, S. W., Fabian, A. C., Kneib, J. P.  
1996; 279 (2): 615-635
- **STARBURSTS IN COOLING FLOWS - BLUE CONTINUA AND EMISSION-LINE NEBULAE IN CENTRAL CLUSTER GALAXIES** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Allen, S. W.  
1995; 276 (3): 947-960
- **COOLING FLOWS, CENTRAL GALAXY-CLUSTER ALIGNMENTS, X-RAY-ABSORPTION AND DUST** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Allen, S. W., Fabian, A. C., Edge, A. C., BOHRINGER, H., White, D. A.  
1995; 275 (3): 741-754
- **OPTICAL SPECTROSCOPY OF THE ROSAT X-RAY BRIGHTEST CLUSTERS .2.** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Crawford, C. S., Edge, A. C., Fabian, A. C., Allen, S. W., BOHRINGER, H., Ebeling, H., McMahon, R. G., Voges, W.  
1995; 274 (1): 75-84
- **ZWICKY-3146 - THE MOST MASSIVE COOLING FLOW** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Edge, A. C., Fabian, A. C., Allen, S. W., Crawford, C. S., White, D. A., BOHRINGER, H., Voges, W.  
1994; 270 (1): L1-L5
- **A ROSAT HRI OBSERVATION OF THE ABELL-478 CLUSTER OF GALAXIES** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
White, D. A., Fabian, A. C., Allen, S. W., Edge, A. C., Crawford, C. S., Johnstone, R. M., Stewart, G. C., Voges, W.  
1994; 269 (3): 589-606
- **A ROSAT PSPC INVESTIGATION OF THE CENTAURUS CLUSTER OF GALAXIES** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Allen, S. W., Fabian, A. C.  
1994; 269 (2): 409-426
- **A ROSAT PSPC OBSERVATION OF ABELL-478 - THE DISTRIBUTION OF X-RAY ABSORBING MATTER IN A MASSIVE COOLING FLOW** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Allen, S. W., Fabian, A. C., Johnstone, R. M., White, D. A., DAINES, S. J., Edge, A. C., Stewart, G. C.  
1993; 262 (4): 901-914
- **OPTICAL SPECTROSCOPY OF THE ROSAT X-RAY BRIGHTEST CLUSTERS** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Allen, S. W., Edge, A. C., Fabian, A. C., BOHRINGER, H., Crawford, C. S., Ebeling, H., Johnstone, R. M., Naylor, T., Schwarz, R. A.  
1992; 259 (1): 67-81
- **3C 109 - AN OBSCURED X-RAY LUMINOUS QUASAR** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Allen, S. W., Fabian, A. C.  
1992; 258 (1): P29-P32
- **GINGA AND EXOSAT OBSERVATIONS OF THE PERSEUS CLUSTER OF GALAXIES** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*  
Allen, S. W., Fabian, A. C., Johnstone, R. M., Nulsen, P. E., Edge, A. C.  
1992; 254 (1): 51-58