

# KENNETH W. CAVAGNOLO

## IN PREPARATION

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(18) “*Entropy Scaling Relations of ACCEPT Galaxy Clusters*”

**K. Cavagnolo**, G. M. Voit, M. Donahue, & S. Bruch – In prep. for ApJL

(17) “*How Difficult is SMBH Spin Axis Reorientation? Implications for AGN Feedback Models*”

**K. Cavagnolo** – In prep. for ApJL

(16) “*Identifying AGN Feedback Relics Via Steep Spectrum Radio Sources*”

R. van Weeren, A. Edge, H. Röttgering, **K. Cavagnolo**, B. McNamara, M. Wise, M. Brüggen, G. Brunetti, & J. Croston – In prep. for A&A

(15) “*The Radio Halo-Merger-Cooling Connection in Galaxy Clusters at  $z \sim 0.5$* ”

E. Orrù, C. Ferrari, M. Arnaud, **K. Cavagnolo**, J. Croston, N. Jetha, G. Pratt, E. Pointecouteau, & S. Raychaudhury – In prep. for A&A

(14) “*Normalization and Scatter of the  $M-T$  Relation for Supermassive Galaxy Clusters*”

R. Mandelbaum, R. Nakajima, N. Bahcall, G. Bernstein, **K. Cavagnolo**, M. Donahue, J. Hughes, C. Keeton, A. Kravtsov, S. Miyazaki, N. Padmanabhan, & T. Schrabback – In prep. for ApJ

## SUBMITTED

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(13) “*Direct Evidence of Radiative and Mechanical Feedback from the Quasar in IRAS 09104+4109*”

**K. Cavagnolo**, M. Donahue, G. M. Voit, B. McNamara, & M. Sun – Submitted to MNRAS

(12) “*A Powerful AGN Outburst in RBS 797*”

**K. Cavagnolo**, B. McNamara, M. Wise, P. Nulsen, M. Brüggen, M. Gitti, & D. Rafferty – Submitted to ApJ

(11) “*Anisotropic Metal-enriched Outflows Driven by AGN in Clusters of Galaxies*”

C. Kirkpatrick, B. McNamara, & **K. Cavagnolo** – Submitted to ApJL

## FIRST AUTHOR REFEREED

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(10) “*A Relationship Between AGN Jet Power and Radio Luminosity*”

**K. Cavagnolo**, B. McNamara, P. Nulsen, C. Carilli, C. Jones, & L. Bîrzan – [ApJ Published, 2010](#)

(9) “*Intracluster Medium Entropy Profiles for a Chandra Archival Sample Of Galaxy Clusters*”

**K. Cavagnolo**, M. Donahue, G. M. Voit, & M. Sun – [ApJ Published, 2009](#)

(8) “*An Entropy Threshold for Strong  $H\alpha$  and Radio Emission in the Cores of Galaxy Clusters*”

**K. Cavagnolo**, M. Donahue, G. M. Voit, & M. Sun – [ApJ Published, 2008](#)

(7) “*Bandpass Dependence of X-Ray Temperatures in Galaxy Clusters*”

**K. Cavagnolo**, M. Donahue, G. M. Voit, & M. Sun – [ApJ Published, 2008](#)

## CO-AUTHOR REFEREED

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- (6) “*Direct Evidence for an Outflow of Metal-Enriched Gas Along the Radio Jets of Hydra A*”  
C. Kirkpatrick, M. Gitti, **K. Cavagnolo**, B. McNamara, L. David, P. Nulsen, & M. Wise – [ApJL Published, 2009](#)
- (5) “*A Chandra X-ray Analysis of Abell 1664: Cooling, Feedback and Star Formation in the Central Cluster Galaxy*”  
C. Kirkpatrick, B. McNamara, D. Rafferty, P. Nulsen, L. Birzan, F. Kazemzadeh, M. Wise, M. Gitti, & **K. Cavagnolo** – [ApJ Published, 2009](#)
- (4) “*Conduction and the Star Formation Threshold in Brightest Cluster Galaxies*”  
G. M. Voit, **K. Cavagnolo**, M. Donahue, D. Rafferty, B. McNamara, & P. Nulsen – [ApJ Published, 2008](#)
- (3) “*Star Formation, Radio Sources, Cooling X-Ray Gas and Galaxy Interactions in the Brightest Cluster Galaxy in 2A0335+096*”  
M. Donahue, M. Sun, C. O’Dea, G. M. Voit, & **K. Cavagnolo** – [AJ Published, 2007](#)
- (2) “*s-Process Abundances in Planetary Nebulae*”  
B. Sharpee, Y. Zhang, R. Williams, E. Pellegrini, **K. Cavagnolo**, J. Baldwin, M. Phillips, & X. Liu – [ApJ Published, 2007](#)
- (1) “*Entropy Profiles in the Cores of Cooling Flow Clusters of Galaxies*”  
M. Donahue, D. Horner, **K. Cavagnolo**, & G. M. Voit – [ApJ Published, 2006](#)

## PRESENTED WORK

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|---|----------------|
| University of Wisconsin-Madison; The Monster’s Fiery Breath Meeting<br>Talk: “ <i>The AGN Jet Power and Radio Power Relationship</i> ”  | June 2009      |
| University of Waterloo; Seminar<br>Invited Talk: “ <i>Using Galaxy Clusters as Galaxy Formation Labs</i> ”                              | October 2008   |
| Leiden University; The Cool, Cooler, and Cold Meeting<br>Invited Talk: “ <i>Understanding Cluster Cores: The Role of Core Entropy</i> ” | September 2008 |
| Center for Study of Cosmic Evolution; Seminar<br>Invited Talk: “ <i>Investigating Feedback and Relaxation in Clusters of Galaxies</i> ” | July 2008      |
| University of Waterloo; Seminar<br>Invited Talk: “ <i>From Cluster Cosmology to Galaxy Formation in Under One Hour</i> ”                | March 2008     |
| NASA Space Science and Technology Center; Seminar<br>Invited Talk: “ <i>The Effect of AGN Feedback on High-Precision Cosmology</i> ”    | February 2008  |
| Center for Study of Cosmic Evolution; Seminar<br>Invited Talk: “ <i>Understanding Feedback in Galaxy Clusters</i> ”                     | January 2008   |

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| University of Michigan; Seminar<br>Invited Talk: " <i>Band Dependence of X-ray Temperatures</i> "   | October 2007  |
| University of Alabama-Huntsville; Eight Years of Science with Chandra Meeting<br>Poster: " <i>The Entropy-Feedback Connection and Quantifying Cluster Virialization</i> " | October 2007  |
| American Astronomical Society Meeting<br>Poster: " <i>Chandra Studies of Dark Matter and Galaxy Formation: Signatures from the ICM</i> "                                  | December 2006 |
| International Astronomical Union Symposium<br>Proceeding: " <i>Abundances of s-process elements in planetary nebulae: Br, Kr &amp; Xe</i> "                               | July 2006     |
| American Astronomical Society Meeting<br>Poster: " <i>Studies of Entropy Distributions in X-ray Luminous Clusters of Galaxies</i> "                                       | December 2005 |
| American Astronomical Society Meeting<br>Poster: " <i>Entropy Distributions in the Cores of Nearby X-ray Luminous Clusters of Galaxies</i> "                              | December 2004 |
| American Astronomical Society Meeting<br>Poster: " <i>Radio-Free Cluster Cooling Flows</i> "  | December 2004 |