

## Dr. Kenneth W. Cavagnolo List of Publications

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*Last updated February 1, 2010; [Hyperlinks colored blue](#)*

<b>In Preparation</b>	<p><i>“A Relationship Between AGN Jet Power and Radio Luminosity”</i>  <b>K. Cavagnolo</b>, B. McNamara, P. Nulsen, C. Carilli, C. Jones, W. Forman, &amp; L. Bîrzan  Submitted to ApJ</p> <p><i>“Mechanical Feedback from the Obscured Quasar in IRAS 09104+4109”</i>  <b>K. Cavagnolo</b>, M. Donahue, B. McNamara, G. M. Voit, &amp; M. Sun  Submitted to MNRAS</p> <p><i>“A Multiwavelength Analysis of the Galaxy Cluster RBS 797: Evidence for a Cluster-scale Line-of-Sight AGN Outburst”</i>  <b>K. Cavagnolo</b>, B. McNamara, P. Nulsen, M. Wise, M. Gitti, &amp; M. Brüggen  In prep. for ApJ</p> <p><i>“Entropy Scaling Relations of ACCEPT Galaxy Clusters”</i>  <b>K. Cavagnolo</b>, G. M. Voit, M. Donahue, &amp; S. Bruch  In prep. for ApJL</p> <p><i>“The Complications of SMBH Spin Axis Reorientation and Implications for AGN Feedback Models”</i>  <b>K. Cavagnolo</b>, B. McNamara, &amp; N. Afshordi  In prep. for ApJL</p> <p><i>“Normalization and Scatter of the Mass-Temperature relation for Supermassive Galaxy Clusters”</i>  R. Mandelbaum, R. Nakajima, G. Bernstein, <b>K. Cavagnolo</b>, M. Donahue, C. Keeton, J. Hughes, N. Bahcall, T. Schrabback, N. Padmanabhan, S. Miyazaki, &amp; A. Kravtsov  In prep. for ApJ</p> <p><i>“Constraining the Spin of Supermassive Black Holes Using Measured AGN Jet Powers”</i>  M. Rohanizadegan, B. McNamara, F. Kazemzadeh, P. Nulsen, &amp; <b>K. Cavagnolo</b>  In prep. for ApJ</p> <p><i>“Identifying AGN Feedback Relics Via Steep Spectrum Radio Sources”</i>  A. Edge, <b>K. Cavagnolo</b>, H. Röttgering, B. McNamara, M. Wise, M. Brüggen, R. van Weeren, G. Brunetti, &amp; J. Croston  In prep. for MNRAS</p>
<b>First Author Refereed Papers</b>	<p><i>“Intracluster Medium Entropy Profiles for a Chandra Archival Sample Of Galaxy Clusters”</i>  <b>K. Cavagnolo</b>, M. Donahue, G. M. Voit, &amp; M. Sun  <a href="#">ApJ Accepted, 2009</a></p>

*“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 Accepted, 2008](#)

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

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

**Co-Author  
Refereed  
Papers**

*“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 Accepted, 2009](#)

*“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 Accepted, 2009](#)

*“Conduction and the Star Formation Threshold in Brightest Cluster Galaxies”*

G. M. Voit, **K. Cavagnolo**, M. Donahue, D. Rafferty, B. McNamara, & P. Nulsen  
[ApJ Accepted, 2008](#)

*“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 Accepted, 2007](#)

*“s-Process Abundances in Planetary Nebulae”*

B. Sharpee, Y. Zhang, R. Williams, E. Pellegrini, **K. Cavagnolo**, J. Baldwin, M. Phillips, & X. Liu  
[ApJ Accepted, 2007](#)

*“Entropy Profiles in the Cores of Cooling Flow Clusters of Galaxies”*

M. Donahue, D. Horner, **K. Cavagnolo**, & G. M. Voit  
[ApJ Accepted, 2006](#)

**Presented  
Work  
& Talks**

POSTER: *“IRAS 09104+4109: At the Cross-roads of Massive Galaxy Formation?”*  
 Jun. 2010 – From Massive Galaxy Formation to Dark Energy; University of Tokyo-Kashiwa

POSTER: *“Probing SMBH Accretion History Via Radio Luminosities”*  
 Apr. 2010 – What drives the growth of black holes?; Durham University

TALK: *“The AGN Jet Power and Radio Power Relationship for Isolated Giant Elliptical Galaxies”*  
 Jun. 2009 – The Monster’s Fiery Breath: Feedback in galaxies, groups, and clusters; University of Wisconsin-Madison

INVITED TALK: *“Using Galaxy Clusters as Galaxy Formation Labs”*

Oct. 2008 – Undergraduate Seminar Series; University of Waterloo

INVITED TALK: *“Understanding Cluster Cores: The Role of Core Entropy”*

Sep. 2008 – The Cool, Cooler and Cold - Cluster Cooling Flows in a New Light; Leiden University

INVITED TALK: *“Investigating Feedback and Relaxation in Clusters of Galaxies”*

Jul. 2008 – Center for Study of Cosmic Evolution; Michigan State University

INVITED TALK: *“From Cluster Cosmology to Galaxy Formation in Under One Hour”*

Mar. 2008 – Astrophysics Seminar; University of Waterloo

INVITED TALK: *“The Effect of Cluster Feedback on High-Precision Cosmology”*

Feb. 2008 – NASA Space Science and Technology Center; University of Alabama-Huntsville

INVITED TALK: *“Understanding Feedback in Galaxy Clusters”*

Jan. 2008 – Center for Study of Cosmic Evolution; Michigan State University

INVITED TALK: *“Band Dependence of X-ray Temperatures”*

Oct. 2007 – Astrophysics Seminar; University of Michigan

POSTER: *“The Entropy-Feedback Connection and Quantifying Cluster Virialization”*

Oct. 2007 – Eight Years of Science with Chandra; University of Alabama-Huntsville

POSTER: *“Chandra Studies of Dark Matter and Galaxy Formation: Signatures from the Intracluster Medium”*

Dec. 2006 – American Astronomical Society Meeting

PROCEEDING: *“Abundances of s-process elements in planetary nebulae: Br, Kr & Xe”*

Jul. 2006 – International Astronomical Union Symposium

POSTER: *“Studies of Entropy Distributions in X-ray Luminous Clusters of Galaxies”*

Dec. 2005 – American Astronomical Society Meeting

POSTER: *“Entropy Distributions in the Cores of Nearby X-ray Luminous Clusters of Galaxies”*

Dec. 2004 – American Astronomical Society Meeting

POSTER: *“Radio-Free Cluster Cooling Flows”*

Dec. 2004 – American Astronomical Society Meeting