

# RYAN C. HICKOX

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Observational astrophysicist. Interests include active galactic nuclei, galaxy evolution, large-scale structure of the Universe, the cosmic X-ray background, X-ray binary pulsars, analysis of data from *Chandra*, *NuSTAR*, *XMM-Newton*, *Hubble*, *Spitzer WISE*, and *Herschel* space telescopes and ground-based spectroscopy.

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## EDUCATION

**Harvard University** – Ph.D. in Astronomy, defended October 2007 (conferred June 2008)

**Yale University** – B.S. in Physics *magna cum laude*, May 2000

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## APPOINTMENTS

### **Department of Physics and Astronomy, Dartmouth College**

Professor, 2020–present.  
Associate Professor, 2017–2020.  
Assistant Professor, 2011–2017.

### **Department of Physics, Durham University**

STFC Postdoctoral Fellow, 2009–2011.

### **Smithsonian Astrophysical Observatory**

SAO Postdoctoral Fellow, 2007–2009. Supervisor: Christine Jones.

### **Department of Astronomy, Harvard University**

Ph.D. Candidate, 2002–2007, NASA GSRP Fellow and Harvard Merit Fellow.  
Thesis: “Active Galactic Nuclei and the Unresolved Cosmic X-ray Background”  
Advisors: Dr. Christine Jones & Prof. Ramesh Narayan.

### **Physics Department, Yale University**

Senior thesis research, 1999–2000. Experimental particle physics (neutral  $B$  meson oscillation) with data from the CDF detector at Fermilab. Advisor: Prof. Colin Gay.

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## FELLOWSHIPS, PRIZES, AND AWARDS

- Wetterhahn Memorial Award for Distinguished Scholarly or Creative Achievement (2017)
- NSF CAREER Award (2016–21) • Alfred P. Sloan Research Fellowship (2014–16)
- Dartmouth Class of 1962 Faculty Fellowship (2014–15) • STFC Postdoctoral Fellowship (2009–11)
- Einstein Fellowship (2009, declined) • Marshall Sherfield Fellowship (2009, declined)
- SAO Postdoctoral Fellowship (2007–2009) • NASA GSRP Fellowship (2005–2007)
- Harvard Merit Fellowship (2006–2007) • Harvard Distinction in Teaching (2004, 2005, 2006)
- Schultz Prize for experimental physics, Yale University (May 2000)

## TEACHING AND ADVISING

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### ***Dartmouth College (2011–present)***

#### **Courses**

- *Astronomy 2/3*, “Exploring the Universe”, Fall 2012–13, 2015–19; Summer 2019–20 (Astro 2 only)
- *Astronomy 15*, “Stars & the Milky Way”, Spring 2012, 2013, 2014, 2016, 2018
- *Astronomy 19*, “Habitable Planets”, Spring 2017, 2019
- *Astronomy 25*, “Galaxies and Cosmology”, Winter 2014, Spring 2015
- *Astronomy 118*, “Observational Cosmology”, Winter 2012
- *Physics 13*, “Introductory Physics I”, Winter 2021

#### **Current research group**

- Postdoctoral associate: T. Ananna (2019–present); • PhD students: C. Carroll (2013–present; GK-12 Fellow 2014-15), W. Yan (2015–present), K. Whalen (2017–present), G. Petter (2019–present), C. Hinrichs (2020–present) • Undergraduates: J. Parker ’21, I. Stiehl ’22, K. Sippy ’21

#### **Previous members**

- Postdoctoral associates: A. Masini (2017–2019; now at SISSA); L. Lanz (2016–2019; now at TCNJ); M. DiPompeo (2015–2018; now at LightStanza); K. Hainline (2012–15; now at U. of Arizona); F. Civano (2012–13; now at Harvard-Smithsonian Center for Astrophysics)
- PhD students: M. Brumback (2014–2018; now at Caltech); M. Jones (2012–18; NASA Jenkins Fellow 2015–18; GK-12 Fellow 2013-14); now at Aerospace Corp); S. Cohen (starting 2013; Neukom Fellow; defended 2016, now at St. Paul’s School); C.-T. Chen (2011–2015; Neukom Fellow; now at NASA/MSFC)
- Undergraduates: M. Oulmakki (summer 2012), S. Griffis (summer 2012), E. Soto (summer 2013), T. Whalen (2012–14), A. Zervos (2013–14), N. Golini (2015–16), A. Colon (2016), P. Gardner (2015–17), M. Lane (2016–17), F. Rentzeperis (2016–17), R. Hviding (2016–18), E. Golitzin (2017–18), Z. Plante (2017–18), J. Perlmutter (2018–20)

#### **Residential**

House Professor for West House (2015–2023; <http://sites.dartmouth.edu/west-house>)

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### ***Durham University (2009–2011)***

Supervisor for four students (3rd year and 4th year/Master’s). Leader of 2nd year undergraduate tutorials in the Department of Physics. Tutor (advisor) for ten first-year undergraduates, associated with St. Chad’s College.

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### ***Harvard-Smithsonian CfA (2002–2009)***

Teaching Fellow for four Harvard undergraduate courses. Supervised six undergraduates at SAO, including serving as research mentor for four students in the SAO Summer Intern program. Resident Tutor in Physics at Dunster House (undergraduate residential house community of approximately 400 students) from 2003–2007.

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### ***Oundle School (2000–2002)***

The inaugural Peter Ling Fellow at Oundle School in Northamptonshire, England, the largest co-ed boarding school in the UK. On two-year teaching fellowship for young Americans, taught physics, coached sports, and served as Assistant Housemaster in a boarding house.

## RESEARCH GRANTS

Sponsored programs at Dartmouth include 15 research grants, total \$3.1M.

1. NASA Astrophysics Data Analysis Program grant (2019–2021): “Harnessing the Full Power of NASA Wide-Field Surveys: X-Ray Stacking of Sources from NASA Observatories with the Entire NuSTAR and Chandra Archives” – total award \$301K, including subaward to Princeton University
2. NSF Astronomy and Astrophysics research grant (2018–2021): “Collaborative Research: Extreme Starbursts and Outflows: The Formation of Massive Compact Galaxies” (*Collaborative with Bates College, University of Kansas, UC San Diego, University of Wisconsin*) – total Dartmouth award \$205K.
3. *NuSTAR* Cycle 4 Data Analysis grant (2018–19): A definitive investigation of the magnetized accretion flow in the X-Ray pulsar Her X-1 with *NuSTAR* and *XMM*– total Dartmouth award \$86K.
4. *Chandra X-ray Observatory* Data Analysis grant (2017–19): “The *Chandra* Deep Wide-Field Survey: Completing the Next Generation of *Chandra* Extragalactic Surveys” – total Dartmouth award \$295K.
5. *XMM-Newton* Cycle 15 Data Analysis grant (2016–17), “Probing the warped inner accretion flow in SMC X-1 with *XMM* and *NuSTAR*” – total Dartmouth award \$51K.
6. NSF IUSE grant (2016–19): “Improving Communication Abilities of Undergraduate Science Students Through Public Outreach and Education” (subaward from Carthage College, PI: D. Arion) – total Dartmouth award \$73K.
7. NASA Astrophysics Data Analysis Program grant (2016–2018): “Unveiling hidden black holes in the cosmic web: Dark matter halos of WISE quasars from Planck CMB lensing” – total award \$335K, including subaward to University of Wyoming.
8. NSF CAREER award (2016–2021): “CAREER: The Hidden Monsters: Cosmic Evolution of Obscured Supermassive Black Holes” – total award \$672K.
9. NASA (subaward from Caltech, 2015–2018): “NuSTAR Extragalactic Survey and AGN Science” – total Dartmouth award \$261K.
10. *NuSTAR* Cycle 1 Data Analysis grant (2015–16), “Superorbital variation of LMC X-4: Exploring the inner accretion flow with *NuSTAR* and *Suzaku*” – total Dartmouth award \$40K
11. NSF Astronomy and Astrophysics research grant (2015–2017): “Collaborative Research: Cross-correlation of WISE quasars with the Planck CMB lensing maps: A new probe of black holes and large-scale structure” (*Collaborative with Univ. of Wyoming*) – total Dartmouth award \$166K.
12. NASA Jenkins Graduate Fellowship (2015–2018): “Modeling the evolution of galaxies and black holes in X-rays with *NuSTAR* and *Chandra*” (*PI Hickox, graduate student M. Jones*) – total Dartmouth award \$165K.
13. Alfred P. Sloan Fellowship (2014–2016): “The search for hidden supermassive black holes” – total award \$50K.
14. NSF Astronomy and Astrophysics research grant (2012–2015): “Collaborative Research: The Hidden Side of Rapidly Growing Black Holes: Host Masses and Evolution of Obscured Quasars with SDSS and WISE” (*Collaborative with Univ. of Wyoming*) – total Dartmouth award \$248K.
15. NASA Astrophysics Data Analysis Program grant (2012–2015): “The hidden side of rapidly growing black holes: Host masses and evolution of obscured quasars with *WISE*, *Chandra*, *XMM*, *Spitzer* and *GALEX*” (*Institutional PI, collaborative with Univ. of Wyoming*) – total Dartmouth award \$158K.

## OBSERVING AND ARCHIVE PROGRAMS

*PI or primary author of successful proposals for the following programs:*

- *XMM-Newton* Cycle 20 observations (PI: R. Hickox): Uncovering a Hidden Mini-Monster: A Candidate Compton-thick AGN in Mrk 462
- VLA 2020A observations (PI: R. Hickox): Diffuse Emission from a Spectacular Extended Outflow in a Massive Galaxy Merger
- *Chandra* Cycle 18 observations (PI: R. Hickox) “The *Chandra* Deep Wide-Field Survey: Completing the next generation of extragalactic *Chandra* surveys”
- *XMM-Newton* Cycle 15 observations (Priority B, Joint with *NuSTAR*; PI: R. Hickox), “Probing the warped inner accretion flow in SMC X-1 with *XMM* and *NuSTAR*”
- *NuSTAR* Cycle 1 observations (Priority A, Joint with *Suzaku*; PI: R. Hickox), “Superorbital variation of LMC X-4: Exploring the inner accretion flow with *NuSTAR* and *Suzaku*”
- *NuSTAR* Cycle 1 observations (Priority C; PI: R. Hickox), “The search for extreme absorption in “typical” WISE-selected obscured quasars”
- IRAM Plateau de Bure Interferometer observations, summer/fall 2012 (PIs: R. Hickox and J. Geach), “The highest density starbursts in the Universe”
- *XMM-Newton* Cycle 10 proposal (PI: R. Hickox), “A candidate “intermediate-mass” black hole in the dwarf starburst galaxy He 2-10”
- *Chandra* Cycle 9 DDT archive grant (PI: R. Hickox), “Ultra-deep X-ray spectra in the CDF-S: a new class of hard, unabsorbed X-ray AGN?”
- *Chandra* Cycle 9 archive grant (PI: C. Jones), “Harnessing the full power of *Chandra* surveys”
- *Suzaku* Cycle 3 observations (PI: R. Hickox), “Supermassive Black Hole Accretion in Obscured AGN and XBONGs”
- *Suzaku* Cycle 2 observations (PI: R. Hickox), “Superorbital variation in LMC X-4: Exploring the accretion flow”
- *XMM-Newton* Cycle 7 observations (PI: C. Jones), “Exploring Supermassive Black Hole Accretion in  $z > 3$  AGN, Obscured AGN and XBONGs”
- *Spitzer* Cycle 5 observations (PI: C. Jones), “Evolution of AGN and galaxies from  $z \sim 1$ : IRAC observations of DEEP2”
- SALT Fabry-Perot spectroscopy of nearby AGN (2015–16)
- SALT optical spectroscopy (kinematics and redshifts of obscured quasars and ultra-diffuse galaxies, 2011–2020)
- MDM/OSMOS optical spectroscopic observations (caustic masses of C4 SDSS clusters, morphology of AGN narrow-line regions, 2012–2016)
- MMT Hectospec observations (seven survey runs covering the Boötes and XDEEP2 fields, 2008–2011; PIs: R. Hickox and S. Murray)

*Co-I on the following programs:*

- *JWST* Cycle 1 observations (PI C. Tremonti), “What Lies Beneath: Understanding the Hidden Engines Driving Extreme Outflows and Galaxy Quenching”
- *JWST* Cycle 1 observations (PI S. Veilleux), “Witnessing the Circumgalactic Medium in Formation: The Warm Dust and Molecular Gas in a Record-Breaking Galactic Wind”
- *NICER* Cycle 3 observations (PI K. Dage): “Monitoring SMC X-1’s Reprocessed Emission During an Epoch of Superorbital Period Excursion”
- *HST* Cycle 28 observations (PI D. Rupke), “Witnessing the circumgalactic medium in formation: Imaging OVI in the warm-hot CGM of a record-breaking galactic wind”

- *HST* Cycle 28 observations (PI C. Tremonti), “Spatially Resolving Outflows in a  $z \sim 1$  Extremely Red Quasar to Observe a Short-Lived Blowout Phase in Galaxy Evolution”
- *NICER* Cycle 2 observations (PI M. Brumback): “A High-Cadence *NICER* Investigation of Warped Accretion Disk Precession in the X-Ray Pulsar Her X-1”
- *NICER* Cycle 2 observations (PI M. Brumback): “Constraining the Evolution of the Geometry of the Unstable Warped Accretion Disc in Smc X-1”
- *Chandra* Cycle 21 observations (PI L. Lanz) “A Powerful, Hard X-ray Emitting, AGN in a Low-Mass Galaxy in the First Half of the Universe”
- *NuSTAR* Cycle 5 observations (PI L. Lanz) “NGC 1377: A Low-Mass Galaxy with AGN Feedback?”
- *NuSTAR* Cycle 4 observations (PI M. Brumback) A Definitive Investigation of the Magnetized Accretion Flow in the X-ray Pulsar Her X-1 with NuSTAR and XMM”
- SOFIA Cycle 5 observations (PI C. Tremonti), “Probing Dust-obscured Star Formation and AGN Activity in Massive Ultra-compact Galaxies”
- *HST* Cycle 23 observations (PI C. Tremonti), “Direct Imaging of Galactic Winds in Extreme Starburst Galaxies”
- *HST* Cycle 22 observations (PI A. Diamond-Stanic), “How Compact is the Stellar Mass in Eddington-Limited Starbursts?”
- *Chandra* Cycle 15 GO observations (PI A. Reines), “AGN-triggered star formation in the dwarf galaxy He 2-10?”
- *Chandra* Cycle 15 archive grant (PI J. Greene), “The demographics of massive black holes in dwarf galaxies”
- *Chandra* Cycle 14 archive grant (PI A. Goulding), “Harnessing the full power of the widest Chandra field: X-ray stacking of AGN & galaxies in the Sloan Digital Sky Survey”
- *Suzaku* Cycle 7 GO observations (PI: D. Stern), “WISE J1819+4532: an Obscured, Hyperluminous ULIRG/AGN at  $z \sim 2$ ”
- *Herschel* Cycle 2 GO observations (PI: N. Zakamska), “Feedback from luminous obscured quasars”
- *Chandra* Cycle 12 GTO observations (PI: S. Murray), “Detailed X-ray spectra of IR-selected AGN in the Bootes field”
- *Chandra* Cycle 11 observations (joint with *HST*; PI: C. Tremonti), “After the fall: Fading AGN in post-starburst galaxies”
- *Chandra* Cycle 10 observations (PI: A. Stanford), “The Role of AGN in Massive Galaxy Formation”
- *Spitzer* Cycle 5 observations (PI: W. Forman), “Testing the Unified Model with a Complete Sample of Hard X-ray Selected AGN”
- *Spitzer* Cycle 5 observations (PI: M. Werner), “Infrared Search for Hidden AGN”

## PROFESSIONAL ACTIVITIES

- Inaugural House Professor, West House, Dartmouth College, 2015–2023
- Referee for *Nature*, *Nature Astronomy*, *The Astrophysical Journal*, *Astronomy & Astrophysics*, *Monthly Notices of the Royal Astronomical Society*, *Proceedings of the Astronomical Society of Japan*, *Advances in Astronomy*, *New Astronomy*
- Member of the Science and Technology Development Team for the *Lynx* NASA X-ray Mission Concept (2016–2019) (<http://www.wastro.msfc.nasa.gov/lynx/>)
- Elected member of the Executive Committee of the High Energy Astrophysics Division, American Astronomical Society (2020–2023)
- Elected member of the Nominating Committee of the American Astronomical Society (2017–2020)
- Member and Vice-Chair of the Executive Committee of NASA’s Physics of the Cosmos Program Analysis Group (PhysPAG), and Co-Chair of X-ray Science Interest Group (XRSIG) (2018–2021)
- Co-organizer and member of Scientific Organizing Committee for international workshop (anticipated ~150 participants) “What Drives the Growth of Black Holes? A Decade of Reflection”, Reyjavik, Iceland, 29 March–2 April 2021
- Co-organizer of Dartmouth Sestercentennial Symposium: ‘Charles Young’s 1869 Discovery of Coronium: A Celebration of Spectroscopy in Science For Dartmouth’s 250th Year’, Hanover, NH, 24 October 2019
- Co-organizer and member of Scientific Organizing Committee for international workshop (~100 participants) “Are AGN Special? The Environmental Dependence and Global Impact of AGN Activity”, Durham, UK, 30 July–3 August 2018 ([http://astro.dur.ac.uk/Are\\_AGN\\_Special](http://astro.dur.ac.uk/Are_AGN_Special))
- Organizer and member of Scientific Organizing Committee for international workshop (~100 participants) “The Hidden Monsters: Obscured AGN and Connections to Galaxy Evolution in the Era of *NuSTAR* and *WISE*”, Dartmouth, 8–12 August 2016 (<http://www.dartmouth.edu/~hiddenmonsters>)
- Organizer of 2015 New England Regional Quasar and AGN Meeting (NERQUAM), Dartmouth College, 4 June 2015 (<http://www.dartmouth.edu/~hickox/NERQUAM>)
- Co-organizer and member of Science Organizing Committee for international workshop (~100 participants) “AGN vs. Star Formation: The fate of gas in galaxies”, Durham, UK, 28 July–1 Aug. 2014 (<http://astro.dur.ac.uk/AGNvsSF>)
- Organizer for international workshop (~60 participants) “Black Hole Feedback 2012”, Dartmouth, 30 July–3 Aug. 2012 (<http://www.dartmouth.edu/~bhfeedback2012>)
- Chair of Local Organizing Committee for large international conference (~360 participants) on “Galaxy Formation”, Durham, UK, 18–22 July 2011 (<http://astro.dur.ac.uk/Gal2011>)
- Primary organizer (with D. Alexander) of major international workshop “What Drives the Growth of Black Holes?”, Durham, UK, 26–29 July 2010 (<http://astro.dur.ac.uk/growthofblackholes>)
- Member of Science Organizing Committee for: AGN X-ray Surveys: Soft to Hard and Deep to Wide, 42nd COSPAR Scientific Assembly, July 2018; Elusive AGN in the Next Era, George Mason University, June 2017; From Chandra to Lynx: Taking the Sharpest X-ray Vision Fainter and Farther, Harvard University, August 2017
- Member of the Moving Dartmouth Forward Presidential Steering Committee, 2014–15
- Member of Dartmouth departmental and College committees: Department Graduate Committee (2012–2015), Undergrad Curriculum Committee (2014–16), and Strategic Planning Committee

(2014); College Committee on Student Life (2014) and Committee on Off-Campus Activities (2016, 2018); Dartmouth Night Working Group (2018)

- Member of the Science Team for the *NuSTAR* X-ray observatory ([www.nustar.caltech.edu](http://www.nustar.caltech.edu)), launched June 2012. Member of Extragalactic Surveys and Obscured AGN working groups.
- Member of team for proposed *Wide-Field X-Ray Telescope* mission (<http://wfxr.pha.jhu.edu>), leading predictions for analyses of clustering and host galaxies of AGN.
- Contributed to the science cases for proposed *NHXM*, *Generation-X*, and *SMART-X* missions.
- Member of External Review Committee for Department of Physics, Colby College, April 2020
- Member of NOAO Extragalactic TAC (2011–2013)
- Panelist for Guest Observer review for multiple NASA missions
- Panelist for National Science Foundation proposal reviews
- External grant and proposal reviewer for the National Science Foundation, German Research Foundation, European Research Commission, Netherlands Organisation for Scientific Research, South Africa National Research Foundation, Israel Science Foundation, and Chilean National Science and Technology Commission
- Developed STACKFAST code for rapid, flexible X-ray stacking analyses.
- Member of High Energy Astrophysics Division, American Astronomical Society, and the International Astronomical Union

## OUTREACH AND PRESS

- Organizer of order-of-magnitude estimation workshops as part of NSF program:  
<http://sites.dartmouth.edu/estimation>.
- Organizer of AstroConnect program linking schools and scientists over Skype:  
<http://sites.dartmouth.edu/astroconnect>.
- Participant and Co-I in Science Education and Astronomy Outreach program coordinated with the Appalachian Mountain Club and Carthage College, funded by NSF IUSE (2017–2019).
- Contributed to NSF-funded teacher workshops at the University of Wyoming:  
<http://www.uwpd.org/LASSI/>.
- Contributed Chapter on "What is Astronomy?" to *What Are the Arts and Sciences?*, Daniel Rockmore, Ed., University Press of New England, 2017
- Featured in more than a dozen articles in Dartmouth publications including Dartmouth News, The Dartmouth, and The Dartmouth Review.
- Multiple press releases on compact star-forming galaxy research, and appearance on NHPR and Australian Broadcasting Company podcast, December 2014 <http://now.dartmouth.edu/2015/01/an-ancient-galaxy-tells-dartmouth-astronomers-new-tales/>.
- Featured in cover article on “Supergalaxies”, All About Space magazine issue 19, December 2013
- Dartmouth press release on SALT quasar research, July 2013:  
[http://www.eurekalert.org/pub\\_releases/2013-07/dc-snl072413.php](http://www.eurekalert.org/pub_releases/2013-07/dc-snl072413.php)
- ESO press release on submillimeter galaxies: <http://www.eso.org/public/news/eso1206/>.  
Featured by BBC, Space.com, Astronomy.com, Astronomy Now, and others worldwide.
- Presentation and observing session for Camp Dartmouth attendees, 29 July 2016
- Multiple presentations on astronomy for Family Weekends and Dartmouth Bound
- Took part in Dartmouth Science Pub on “Black Holes and Alien Worlds” with Dr. Mike DiPompeo and Brad Vijete at Murphy’s, Hanover, 30 November 2017
- Took part in Dartmouth Science Pub on “Black Holes: Monsters of the Universe” with Prof. Jenny Greene (Princeton) at Murphy’s, Hanover, 17 January 2013
- Guest presenter to Governor’s Institute of Vermont Astronomy Program, Lyndon State College, 2016, 2017, 2018, 2019, 2020 <https://www.giv.org/astronomy/>
- Numerous presentations at astronomy clubs and schools, including 17 public talks in the UK 2010–12 as part of STFC Fellowship.
- Expert-in-Residence at African Leadership Academy, Johannesburg, South Africa, February 2009. Week-long visit to pan-African secondary school for seminars on astronomy and astrophysics.
- Appeared as featured astronomer discussing quasars and AGN on the “Pulsars & Quasars” episode of the TV show *The Universe* on the History Channel, aired October 2009.
- *Chandra* press release for obscured AGN research, 2007:  
[http://chandra.harvard.edu/press/07\\_releases/press\\_031207.html](http://chandra.harvard.edu/press/07_releases/press_031207.html)



## PUBLICATIONS

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### JOURNAL ARTICLES

145 refereed journal articles published or under review. Papers are organized into three groups based on my level of contribution to the research presented in the paper. Most publications here are in three journals: *The Astrophysical Journal*, *Monthly Notices of the Royal Astronomical Society*, and *Astronomy & Astrophysics*. These are the world's three main highly-regarded journals that are dedicated to new results in astrophysics.

*Papers with a primary intellectual or observational contribution (papers led by me or my advisees/postdocs marked with ☆)*

1. ☆ “Chandra Observations of Excess Fe  $K\alpha$  Line Emission in Galaxies with High Star Formation Rates: X-ray Reflection on Galaxy Scales?”, Wei Yan, **Ryan C. Hickox**, Chien-Ting J. Chen, Claudio Ricci, Alberto Masini, Franz E. Bauer, and David M. Alexander, 2021, *The Astrophysical Journal* submitted
2. ☆ “A broad-band X-ray view of the precessing accretion disk and pre-eclipse dip in the pulsar Her X-1 with *NuSTAR* and *XMM-Newton*”, McKinley Brumback, **Ryan Hickox**, Felix Fuerst, Katja Pottschmidt, John Tomsick, Joern Wilms, Ruediger Staubert, and Saeqa Vrtilek, 2021, *The Astrophysical Journal*, 909, 186 (arXiv:2102.05097)
3. ☆ “A Large Population of Luminous Active Galactic Nuclei Lacking X-ray Detections: Evidence for Heavy Obscuration?”, Christopher M. Carroll, **Ryan C. Hickox**, Alberto Masini, Lauranne Lanz, Roberto J. Assef, Daniel Stern, Chien-Ting J. Chen, 2021, *The Astrophysical Journal* 908, 185 (arXiv:2012.04668)
4. ☆ “The Chandra Deep Wide-Field Survey: A New *Chandra* Legacy Survey in the Boötes Field I. X-ray Point Source Catalog, Number Counts and Multi-Wavelength Counterparts”, Alberto Masini, **Ryan C. Hickox**, *et al.*, 2020, *The Astrophysical Journal Supplement*, 251, 2 (arXiv:2009.03317)
5. ☆ “Deviations from the Radio-IR Correlation in Massive, Ultra-compact Starburst Galaxies”, Grayson Petter, Amanda A. Kepley, **Ryan C. Hickox**, Gregory H. Rudnick, Christy A. Tremonti, Aleksandar M. Diamond-Stanic, James E. Geach, Alison L. Coil, Paul H. Sell, John Moustakas, David S. N. Rupke, Serena Perrotta, Kelly E. Whalen, 2020, *The Astrophysical Journal*, 901, 138 (arXiv:2009.03906)
6. ☆ “Modeling the precession of the warped inner accretion disk in the pulsars LMC X-4 and SMC X-1 with *NuSTAR* and *XMM-Newton*”, McKinley C. Brumback, **Ryan C. Hickox**, Felix S. Fuerst, Katja Pottschmidt, John A. Tomsick, Joern Wilms, 2020, *The Astrophysical Journal*, 888, 125 (arXiv:1909.10559)
7. ☆ “Physical Models for the Clustering of Obscured and Unobscured Quasars”, Kelly E. Whalen, **Ryan C. Hickox**, Michael A. DiPompeo, Adam D. Myers, Gordon T. Richards, 2020, *The Astrophysical Journal*, 888, 71 (arXiv:1912.01612)
8. ☆ “Measuring the Obscuring Column of a Disk Megamaser AGN in a Nearby Merger”, A. Masini, A. Comastri, **R. C. Hickox**, M. Koss, F. Civano, M. Brightman, M. Brusa, G. Lanzuisi, 2019, *The Astrophysical Journal*, 882, 83 (arXiv:1907.05426)
9. ☆ “Evolution of Black Hole and Galaxy Growth in a Semi-Numerical Galaxy Formation Model”, Mackenzie L. Jones, **Ryan C. Hickox**, Simon J. Mutch, Darren J. Croton, Andrew F. Ptak, Michael A. DiPompeo, 2019, *The Astrophysical Journal*, 881, 110 (arXiv:1907.00981)

10. ★ “*NuSTAR* Observations of Heavily Obscured Quasars Selected by *WISE*”, Wei Yan, **Ryan C. Hickox** *et al.*, 2019, *The Astrophysical Journal*, 870, 33 (arXiv:1811.02585)
11. ★ “Investigating the Covering Fraction Distribution of *Swift*/*BAT* AGN with X-ray and IR Observations”, Lauranne Lanz, **Ryan C. Hickox** *et al.*, 2019, *The Astrophysical Journal*, 870, 26 (arXiv:1811.02570)
12. ★ “The *NuSTAR* Extragalactic Surveys: Unveiling Rare, Buried AGNs and Detecting the Contributors to the Peak of the Cosmic X-ray Background”, A. Masini, A. Comastri, F. Civano, **R. C. Hickox**, C. M. Carroll, H. Suh, W. N. Brandt, M. A. DiPompeo, F. A. Harrison, and D. Stern, 2018, *The Astrophysical Journal*, 167, 162 (arXiv:1810.00010)
13. ★ “Discovery of Pulsation Dropout and Turn-on during the High State of the Accreting X-Ray Pulsar LMC X-4”, Brumback, McKinley C., **Hickox, Ryan C.**, Bachetti, Matteo, Ballhausen, Ralf, Fuerst, Felix S., Pike, Sean, Pottschmidt, Katja, Tomsick, John A., Wilms, Joern, 2018, *The Astrophysical Journal Letters*, 861, L7 (arXiv:1806.09630)
14. ★ “The [OIII] profiles of infrared-selected active galactic nuclei: More powerful outflows in the obscured population”, M.A. DiPompeo, **R.C. Hickox**, J.C. Runnoe, C.M. Carroll, J.R. Mullaney, T.C. Fischer, 2018, *The Astrophysical Journal*, 856, 76 (arXiv:1803.00083)
15. ★ “A Possible Phase-Dependent Absorption Feature in the Transient X-ray Pulsar SAX J2103.5+4545”, Brumback, M. C., **Hickox, R. C.**, Fürst, F. S., Pottschmidt, K., Tomsick, J., Hemphill, P, Wilms, J., Ballhausen, R., 2018, *The Astrophysical Journal*, 852, 132 (arXiv:1711.11105)
16. ★ “Characterizing the WISE-selected Heavily Obscured Quasar Population with Optical Spectroscopy from the Southern African Large Telescope”, Raphael E. Hviding, **Ryan C. Hickox**, Kevin N. Hainline, Christopher M. Carroll, Michael A. DiPompeo, Wei Yan, and Mackenzie L. Jones, 2018, *Monthly Notices of the Royal Astronomical Society*, 474, 1955 (arXiv:1711.01269)
17. ★ “Composite spectral energy distributions and infrared–optical colors of type 1 and type 2 quasars”, **Ryan C. Hickox**, Adam D. Myers, Jenny E. Greene, Kevin N. Hainline, Nadia L. Zakamska, Michael A. DiPompeo, 2017, *The Astrophysical Journal*, 849, 53 (arXiv:1709.04468)
18. ★ “The characteristic halo masses of half-a-million WISE-selected quasars”, M. A. DiPompeo, **R. C. Hickox**, S. Eftekharzadeh, A. D. Myers, 2017, *Monthly Notices of the Royal Astronomical Society*, 469, 4630 (arXiv:1705.05306)
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*Papers with a contribution in an advisory role or as part of a collaboration*

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101. “Understanding the Nature of an Unusual Post-Starburst Quasar with Exceptionally Strong Ne V Emission”, Cameren Swiggum, Christy Tremonti, Serena Perrotta, Adam Schaefer, **Ryan C. Hickox**, Alison L. Coil, Paul H. Sell, Aleksandar M. Diamond-Stanic, Jalyn Krause, and Gregory Mosby, 2021, *The Astrophysical Journal* submitted
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103. “The Dust-to-Gas Ratio and the Role of Radiation Pressure in Luminous Obscured Quasars”, Hyunsung D. Jun, Roberto J. Assef, Christopher M. Carroll, **Ryan C. Hickox**, Yonghwi Kim, Jaehyun Lee, Claudio Ricci, and Daniel Stern, 2020, *The Astrophysical Journal*, 906, 21 (arXiv:2010.15460)
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114. “The *NuSTAR* Extragalactic Surveys: source catalog and the Compton-thick fraction in the UDS field”, A. Masini *et al.*, 2018, *The Astrophysical Journal Supplement*, 235, 17 (arXiv:1801.01881)
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116. “Hard X-ray Selected AGNs in Low-mass Galaxies from the *NuSTAR* Serendipitous Survey”, C.-T. J. Chen, W. N. Brandt, A. E. Reines, G. Lansbury, D. Stern, D. Alexander, F. Bauer, A. Del Moro, P. Gandhi, F. A. Harrison, **R. C. Hickox**, M. J. Koss, L. Lanz, B. Luo, J. R. Mullaney, C. Ricci, and J. Trump, 2017, *The Astrophysical Journal*, 837, 48 (arXiv:1701.08768)
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119. “Obscured AGNs in bulgeless hosts discovered by *WISE*: An *XMM-Newton* follow-up of SDSS J1224+5555”, S. Satyapal, N.J. Secrest, B. Rothberg, J. O’Connor, S.L. Ellison, **R.C. Hickox**, A. Constantin, M. Gliozzi, J.L. Rosenberg, 2016, *The Astrophysical Journal*, 827, 58 (arXiv:1606.01268)

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125. “A *NuSTAR* Survey of Nearby Ultraluminous Infrared Galaxies”, Stacey H. Teng *et al.*, 2015, *The Astrophysical Journal*, 814, 56 (arXiv:1510.04453)
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134. “*NuSTAR* J033202–2746.8: Direct constraints on the Compton reflection in a heavily obscured quasar at  $z \approx 2$ ”, A. Del Moro *et al.* 2014, *The Astrophysical Journal*, 786, 16 (arXiv:1403.2491)
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142. “Constraining halo occupation properties of X-ray AGNs using clustering of *Chandra* sources in the Boötes survey region”, Starikova, S., Cool, R., Eisenstein, D., Forman, W. R., Jones, C., **Hickox, R. C.**, Kenter, A., Kochanek, C. S., Kravtsov, A., Murray, S. S., Vikhlinin, A. 2011, *The Astrophysical Journal*, 741, 15 (arXiv:1010.1577)
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144. “Low resolution spectral templates for AGNs and galaxies from 0.03–30  $\mu\text{m}$ ”, Assef, R. J. , Kochanek, C. S. , Brodwin, M., Cool, R., Forman, W. R., Gonzalez, A. H., **Hickox, R. C.**, Jones, C., Le Floch, E., Moustakas, J., Murray, S. S., & Stern, D., 2010, *The Astrophysical Journal*, 713, 970–985 (arXiv:0909.3849)
145. “The star formation and nuclear accretion histories of normal galaxies in the AGES survey”, Watson, C. R., Kochanek, C. S., Forman, W. R., **Hickox, R. C.**, Jones, C. J., Brown, M. J.I., Brand, K., Dey, A., Jannuzi, B. T., Kenter, A. T., Murray, S. S., Vikhlinin, A., Eisenstein, D. J., Fazio, G. G., Green, P. J., McNamara, B. R., Rieke, M., Shields, J., *The Astrophysical Journal*, 696, 2206–2219 (arXiv:0903.2219)

## REVIEW ARTICLES, WHITE PAPERS, REPORTS, AND POPULAR WORKS

- R1. “The *Lynx* Concept Study Final Report”, The *Lynx* Science and Technology Definition Team, 2019, <https://wwwastro.msfc.nasa.gov/lynx/docs/LynxConceptStudy.pdf>
- R2. “HEX-P: The High Energy X-ray Probe”, Kristin Madsen, **Ryan C. Hickox**, et al. 2019, White Paper submitted to National Academy of Sciences Astro2020 Decadal Survey
- R3. “Resolving the cosmic X-ray background with a next-generation high-energy X-ray observatory”, **Ryan C. Hickox**, Francesca Civano et al. 2019, White Paper submitted to National Academy of Sciences Astro2020 Decadal Survey (arXiv:1905.11439)
- R4. “Cosmic evolution of supermassive black holes: A view into the next two decades”, Francesca Civano, Nico Cappelluti, **Ryan Hickox**, Rebecca Canning et al. 2019, Science White Paper submitted to National Academy of Sciences Astro2020 Decadal Survey (arXiv:1903.11091)
- R5. “Extremely obscured galaxy nuclei – hidden AGNs and extreme starbursts”, S. Aalto, C. Battersby, D. Rigopoulou, L. Armus, N. Falstad, N. Rangwala, **R. Hickox** et al., 2019, Science White Paper submitted to National Academy of Sciences Astro2020 Decadal Survey
- R6. “Simultaneous Measurements of Star Formation and Supermassive Black Hole Growth in Galaxies”, Alexandra Pope et al., 2019, Science White Paper submitted to National Academy of Sciences Astro2020 Decadal Survey (arXiv:1903.05110)
- R7. “The Future Landscape of High-Redshift Galaxy Cluster Science”, Adam Mantz et al. 2019, Science White Paper submitted to National Academy of Sciences Astro2020 Decadal Survey
- R8. “Obscured Active Galactic Nuclei”, **Ryan C. Hickox** and David M. Alexander, 2018, *Annual Review of Astronomy and Astrophysics*, 56 (arXiv:1806.04680)
- R9. “Active Galactic Nuclei: what’s in a name?” Paolo Padovani, David Alexander, Roberto Assef, Barbara De Marco, Paolo Giommi, **Ryan Hickox**, Gordon Richards Vernesa Smolcic, Evanthia Hatziminaoglou, Vincenzo Mainieri, Mara Salvato, 2017, *The Astronomy and Astrophysics Review*, 25, 2 (arXiv:1707.07134)
- R10. “What is Astronomy?”, **Ryan C. Hickox**, Chapter 4 of *What Are the Arts and Sciences?*, D. Rockmore, Ed., University Press of New England, 2017
- R11. “Host galaxies and large-scale structures of active galactic nuclei”, **Ryan C. Hickox**, Stephanie M. LaMassa, John D. Silverman, Alexander Kolodzig, Astronomy in Focus, as presented at the IAU XXIX General Assembly, 2015. Proceedings of the IAU, Volume 29B, 2016, pp. 113–123 (arXiv:1612.04827)
- R12. “What Drives the Growth of Black Holes?”, Alexander, D. M. & **Hickox, R. C.**, 2012, *New Astronomy Reviews*, 46, 93 (arXiv:1112.1949)
- R13. “Supermassive Black Holes and the Growth of Galaxies”, **Hickox, R. C.**, two-part review for amateur astronomy journal *The Astronomer*, March–April 2011
- R14. “Black holes through cosmic time: Exploring the distant X-ray Universe with extragalactic *Chandra* surveys”, **Hickox, R. C.**, *Chandra* Newsletter cover article, Winter 2009 (arXiv:0904:3543)
- R15. “The growth and evolution of super massive black holes”, Murray, S. S. et al. 2010, Astro2010 Decadal Survey White Paper (arXiv:0903.5272)

## SUMMARY OF KEY FIRST-AUTHOR PUBLICATIONS

- Hickox & Alexander (2018) “*Obscured Active Galactic Nuclei*” – Invited review in *Annual Review of Astronomy & Astrophysics* covering observational methods for identified obscured accreting black holes, as well as the latest physical and cosmological understanding of the population of obscured AGN [115+ citations as determined by the NASA Astrophysics Data System]
- Hickox et al. (2014) “*Black hole variability and the star formation-AGN connection: Do all star-forming galaxies host an AGN?*” – Explored the connection between star formation and black hole growth in galaxies. Demonstrated that assuming short-timecale AGN variability, observations are consistent with *all* star-forming galaxies hosting growing black holes with accretion rates that closely follow the star formation rate, indicating long-term black hole-galaxy co-evolution. [248+ citations]
- Hickox et al. (2012) “*The LABOCA Survey of the Extended Chandra Deep Field South: Clustering of submillimetre galaxies*” – Performed the most precise measurement to date of the spatial clustering of submillimeter galaxies (SMGs). Demonstrated that SMGs at  $z \sim 2$  have clustering consistent with quasars, and that their descendants will be massive ( $\sim 2\text{--}3L^*$ ) ellipticals. [163+ citations]
- Hickox et al. (2009) “*Host galaxies, clustering, Eddington ratios, and evolution of radio, X-ray, and infrared-selected AGNs*” – Measured host galaxy properties and dark matter halo masses for different classes of AGN at  $z \sim 0.5$  from the Boötes survey. Showed that AGNs selected in different wavebands represent separate populations with different Eddington rate distributions, residing in different host galaxies and large-scale environments. [360+ citations]
- Hickox & Markevitch (2006) “*Absolute measurement of the unresolved cosmic X-ray background in the 0.5–8 keV band with Chandra*” – Presented the absolute measurement of the unresolved cosmic X-ray background in the *Chandra* Deep Fields, representing the lowest surface-brightness cosmic X-ray signal ever measured. The results have been used for a variety of applications including constraints on the high redshift growth of supermassive black holes and measurements of the warm-hot intergalactic medium. [265+ citations]

## PRESENTATIONS

Presentations include 79 invited talks, colloquia, and discussions, 64 contributed talks, seminars and lunch talks, and 51 conference posters.

### Invited talks and colloquia

1. *Upcoming*: “The X-ray background and the history of accretion onto supermassive black holes”, Mapping the X-ray sky with SRG: First Results from eROSITA and ART-XC, Garching, Germany (postponed from March 2020 due to travel restrictions)
2. *Upcoming*: “Windows on the Hidden Evolution of Supermassive Black Holes and Galaxies”, Washington University in St. Louis Physics Colloquium (virtual), 7 April 2021
3. “The hidden and elusive growth of black holes over cosmic time”, Formation and Growth of Supermassive Black Holes, Pucón, Chile (virtual), 8-12 December 2020
4. “Windows on the Hidden Evolution of Supermassive Black Holes and Galaxies”, CAR Astronomy Seminar, University of Hertfordshire (virtual), 25 November 2020
5. “Windows on the Hidden Evolution of Supermassive Black Holes”, Stanford/KIPAC Astrophysics Colloquium (virtual), 1 October 2020
6. “The Hidden Monsters: New Windows on the Cosmic Evolution of Supermassive Black Holes and Galaxies”, Colloquium, Montana State University, 28 February 2020
7. “Science with deep surveys: galaxy evolution and the X-ray background”, Twenty Years of Science with *Chandra*, Boston, MA, 3–6 December 2019
8. “The dark and the light: Cosmic evolution of supermassive black holes”, Astronomy Seminar, Queen’s University, Kingston, ON, 7 October 2019
9. “Black holes near and far: Environments and evolution of active galactic nuclei”, SPS Colloquium, University of Connecticut, 3 May 2019
10. Invited panelist for discussion on “Accretion Signatures of the Earliest Black Holes in the Universe”, Princeton University, 3–5 April 2019
11. “Black Holes and Their Environment”, The Space Astrophysics Landscape in the 2020s and Beyond, AURA Symposium, Potomac, MD, 1–3 April 2019
12. “The Energetic Universe in Focus: Twenty Years of Science with the *Chandra X-ray Observatory*”, High Energy Astrophysics Seminar, Harvard-Smithsonian Center for Astrophysics, Cambridge, MA, 30 January 2019
13. “The Energetic Universe in Focus: Twenty Years of Science with the *Chandra X-ray Observatory*”, invited plenary talk, American Astronomical Society Annual Meeting, Seattle, WA, 6–10 January 2019
14. “Exploring the full accretion history of AGN with *Lynx*”, invited presentation, Accretion History of AGN workshop, Miami, FL, 18–20 October 2018
15. “Clustering of AGN from WISE and a quick intro to the Chandra Deep Wide-Field Survey”, invited presentation, Accretion History of AGN workshop, Miami, FL, 18–20 October 2018
16. Invited presentation and panel discussion at IAU Focus Meeting 13: Global Coordination of International Astrophysics and Heliophysics Activities from Space and Ground, Vienna, Austria, 20–22 August 2018

17. “What larger-scale environments facilitate AGN activity?”, Discussion Leader, Are AGN Special?, Durham, UK, 30 July–3 August 2018
18. “The star formation – AGN connection”, Massive black holes in evolving galaxies: from quasars to quiescence, Institute d’Astrophysique de Paris, Paris, France, 24-29 June, 2018
19. “The Hidden Monsters: New Windows on the Cosmic Evolution of Supermassive Black Holes”, Astronomy Seminar, Mitchell Institute, Texas A&M University, 9 April 2018
20. “The Hidden Monsters: New Windows on the Cosmic Evolution of Supermassive Black Holes”, Colloquium, University of Massachusetts Amherst and Five College Astronomy Department, 1 March 2018
21. “Black holes in the cosmic web: Evolution of AGN, galaxies, and large-scale structures in the era of *WFIRST*”, *WFIRST* Splinter Meeting, American Astronomical Society Annual Meeting, Washington, DC, 8–12 January 2018
22. “Future prospects with the Chandra and XMM source catalogs: Setting the stage for Lynx”, Special Session on Data Driven Discoveries in Serendipitous X-ray Catalogs, American Astronomical Society Annual Meeting, Washington, DC, 8–12 January 2018
23. “Revealing the dawn of black holes with the Lynx X-ray Observatory”, NASA Hyperwall Talk, American Astronomical Society Annual Meeting, Washington, DC, 8–12 January 2018
24. “The Hidden Monsters: New Windows on the Cosmic Evolution of Supermassive Black Holes”, Physics & Astronomy Colloquium, University of St. Andrews, UK, 8 December 2017
25. “The Hidden Monsters: New Windows on the Cosmic Evolution of Supermassive Black Holes”, Physics & Astronomy Colloquium, Dartmouth College, 10 March 2017
26. “The Hidden Monsters: New Windows on the Cosmic Evolution of Supermassive Black Holes”, Astronomy Colloquium, Pennsylvania State University, 1 March 2017
27. “Active Galactic Nuclei and Large-Scale Structures”, NASA *Lynx* Mission Concept Study Seminar Series (on the Web), 18 January 2017
28. “The Hidden Monsters: New Windows on the Cosmic Evolution of Supermassive Black Holes”, Astrophysics Seminar, McGill University, Montreal, QC, 17 January 2017
29. “The Hidden Monsters: New Windows on the Cosmic Evolution of Supermassive Black Holes”, Astronomy Colloquium, Yale University, New Haven, CT, 8 December 2016
30. “The X-ray Surveyor Mission Concept”, *NuSTAR* Science Meeting, Pasadena, CA, 15–17 November 2016
31. “The Synthesis of the Cosmic X-ray Background with *NuSTAR*”, *NuSTAR* Science Meeting, Pasadena, CA, 15–17 November 2016
32. “Hidden Monsters: The Cosmic Evolution of Supermassive Black Holes”, Astrophysics Colloquium, Kavli Institute for Astrophysics and Space Research, MIT, Cambridge, MA, 8 November 2016
33. “Black holes in the cosmic web: The big picture of AGN and large-scale structure”, Hot Spots in the XMM Sky: Cosmology from X-ray to Radio, Mykonos, Greece, 15–18 June 2016
34. “The Hidden Monsters: Obscured AGN in the Era of *NuSTAR* and *WISE*”, Joint Princeton/Institute for Advanced Study Astrophysics Colloquium, Princeton, NJ, 22 March 2016
35. “The Hidden Monsters: Obscured AGN in the Era of *NuSTAR* and *WISE*”, Berkeley Center for Cosmological Physics Seminar, Berkeley, CA, 8 March 2016



36. “Supermassive Black Holes and the Growth of Galaxies”, Quinsigamond Community College, Worcester, MA, 10 February 2016
37. “Uncovering the Black Hole–Galaxy Connection”, Physics Colloquium, University of Vermont, 20 January 2016
38. “The Hidden Monsters: Obscured AGN in the Era of *Chandra*, *NuSTAR*, and *WISE*”, Steve Murray Lecture, High Energy Astrophysics Seminar, Harvard-Smithsonian Center for Astrophysics, 9 December 2015
39. “A new framework for understanding the AGN-star formation connection”, SEAL Talk, NASA Goodard Space Flight Center, 3 December 2015
40. “Uncovering the hidden growth of supermassive black holes”, Astrophysics Colloquium, Boston University, 30 November 2015
41. “Large-Scale Clustering and Host Galaxies of AGN”, Invited talk, Focus Meeting 6: "X-ray surveys of the hot and energetic cosmos", XXIX IAU General Assembly, Honolulu, HI, 5–6 August 2015
42. “The SF-AGN connection: Do all star-forming galaxies host an AGN?”, Colloquium, Space Telescope Science Institute, Baltimore, MD, 4 December 2014
43. “The monsters within: The cosmic evolution of black holes, galaxies, and dark matter halos”, Astronomy & Physics Colloquium, St. Mary’s University, Halifax, CA, 10 October 2014
44. “The monsters within: The cosmic evolution of black holes, galaxies, and dark matter halos”, Physics & Astronomy Colloquium, Tufts University, 3 October 2014
45. “The SF-AGN connection: Does AGN activity follow or prevent star formation?”, Review talk, AGN vs. Star Formation: The Fate of the Gas in Galaxies, Durham, UK, 28 July–3 August 2014
46. Workshop Summary, Clustering Measurements of Active Galactic Nuclei, ESO, Garching, Germany, 14–18 July 2014
47. “The Zoo of AGN and a coherent picture of AGN clustering”, Clustering Measurements of Active Galactic Nuclei, ESO, Garching, Germany, 14–18 July 2014
48. “The Hidden Monsters: Obscured quasars in the era of *WISE* and *NuSTAR*”, High Energy Seminar, MPA, Garching, Germany, 20 December 2013
49. “Black holes and galaxy evolution: Does AGN activity follow or prevent star formation?”, Joint Astronomy Colloquium, ESO/MPA/MPE/TUM, Garching, Germany, 19 December 2013
50. “AGN feedback and the connection to triggering”, Review talk, The Triggering Mechanisms for Active Galactic Nuclei, Lorentz Center, Leiden, Netherlands, 22–26 July 2013
51. “The beauty of simplicity: Understanding galaxy and black hole evolution”, HEAD lunch talk, Harvard-Smithsonian Center for Astrophysics, Cambridge, MA, 16 July 2013
52. “The beauty of simplicity: Some insights on galaxy and black hole formation”, Physics & Astronomy Colloquium, Dartmouth College, 8 March 2013
53. “The dark and the light: Black holes, dark halos, and their influence on galaxy evolution”, Astronomy Seminar, Rutgers University, 7 March 2013
54. “The dark and the light: Black holes, dark halos, and their influence on galaxy evolution”, Cosmology Seminar, University of California, Berkeley, 12 February 2013
55. “The dark and the light: Black holes, dark halos, and their influence on galaxy evolution”, Cosmology Seminar, Stanford University, Palo Alto, CA, 11 February 2013

56. “The dark and the light: Black holes, dark matter halos, and their influence on galaxy evolution”, CRA Seminar, Center for Relativistic Astrophysics, Georgia Institute of Technology, 24 January 2013
57. “The dark and the light: Black holes, dark matter halos, and their influence on galaxy evolution”, Astronomy Colloquium, University of Florida, 23 January 2013
58. “Black Holes in the Cosmic Web: Clustering and Host Galaxies of AGN”, Illuminating the AGN/Galaxy Connection, Ringberg Castle, Germany, 3–5 December 2012
59. “What Drives the Growth of Black Holes?”, Astronomy Colloquium, University of Massachusetts, Amherst, MA, 29 November 2012
60. “Is star formation in galaxies influenced by the presence of an AGN?”, Discussion Leader, Black Hole Feedback 2012, Dartmouth College, Hanover, NH, 30 July-3 August 2012
61. “AGN evolution and the growth of supermassive black holes”, Review talk, Black Hole Universe 2012, Bamberg, Germany, 18–22 June 2012
62. “What drives the growth of black holes?”, Physics & Astronomy Colloquium, University of Wyoming, 23 March 2012
63. Conference summary on “Extreme Activity: Starbursts and Active Galactic Nuclei”, Galaxy Formation, Durham, UK, 18–22 July 2011
64. “What drives the growth of black holes?”, Astronomy Seminar, University of Sussex, 17 June 2011
65. “What drives the growth of black holes?”, Astronomy Seminar, University of Nottingham, 8 June 2011
66. “What drives the growth of black holes?”, Invited talk, 218th Meeting of the American Astronomical Society, Boston, MA 25 May 2011
67. “The dark and the light: Black holes, dark matter halos, and their influence on galaxy evolution”, INAF/Osservatorio di Bologna, Bologna, Italy, 12 May 2011
68. Leader of extended discussion on “Multi-wavelength AGN activity and tracers”, 2011 Aspen Meeting on Galaxy Evolution, Aspen, CO, 20 March 2011
69. “The dark and the light: Black holes, dark matter halos, and their influence on galaxy evolution”, Physics Colloquium, Dartmouth College, 21 February 2011
70. “The dark and the light: Black holes, dark halos, and their influence on galaxy evolution”, Astrophysics Seminar, University of Bristol, 17 February 2011
71. “Black holes in the cosmic web: host galaxies and large-scale environments of AGN”, Astrophysics Seminar, University of Sheffield, 16 February 2011
72. “The dark and the light: Black holes, dark halos, and their influence on galaxy evolution”, Steward-NOAO Joint Colloquium, Tucson, AZ, 18 January 2011
73. “The dark and the light: Black holes, dark halos, and their influence on galaxy evolution”, Astrophysics Seminar, UCL Mullard Space Science Laboratory, 28 October 2010
74. “Host galaxies and large-scale environments of AGN”, Astrophysics Seminar, University of Southampton, 27 October 2010
75. “Black holes in the cosmic web”, Invited review, AGN Populations, Parameters, and Power workshop, Birmingham, UK, 27 September 2010

76. “Black holes in the cosmic web: host galaxies and large-scale environments of AGN”, Exploratory workshop on Cosmogony of AGN: Unifying Approaches for the Next Decade, Brindisi, Italy, 3 September 2010
77. “The big picture of AGN feedback”, Astrophysics Seminar, University of Birmingham, 12 May 2010
78. “The big picture of AGN feedback: black hole accretion and galaxy evolution in multiwavelength surveys”, Astrophysics Seminar, University of Leicester, 28 October 2009
79. “Black holes through cosmic time: Exploring the distant X-ray Universe with extragalactic *Chandra* surveys”, Invited review, NERQUAM 2009, Brandeis University, 20 May 2009
80. “Massive Halos and Violent Mergers – Supermassive Black Hole and Galaxy Evolution in the Wide-field Boötes Survey”, Colloquium, South African Astronomical Observatory, Cape Town, 12 March 2009
81. “Evolution and environments of active galactic nuclei”, Astronomy Colloquium, Wesleyan University, Middletown, CT, 1 October 2008

### Contributed talks and seminars

1. “First Black Holes”, NASA Webinar, AAS Annual Meeting (virtual), 13 January 2020
2. “Highlights in X-ray Astronomy”, NASA PCOS Town Hall, AAS Annual Meeting (virtual), 11 January 2021
3. “Obscuration and evolution in luminous quasars”, AAS Annual Meeting, Honolulu, HI, 5–8 January 2020
4. “Uncovering the most heavily buried AGN”, Quasar Tea, Center for Astrophysics | Harvard & Smithsonian, Cambridge, MA, 22 November 2019
5. “Heavily buried AGN: Torus or Host galaxy?”, Accretion History of AGN workshop, Miami, FL, 17–19 October 2019
6. “The Dawn of Black Holes and the Invisible Side of Galaxy Formation with *Lynx*”, *Lynx* Special Session, AAS Annual Meeting, St. Louis, MO, 9 June 2019
7. “Resolving the Cosmic X-ray Background”, Memorial Symposium to Honor Riccardo Giacconi, National Academy of Sciences, Washington, DC, 29–30 May 2019
8. “Kpc-scale Ionization Structures in NGC 1068 from Fabry- Perot observations with SALT: Light Echoes from AGN Flickering?”, NERQUAM 2019, MIT, Cambridge, MA, 6 May 2019
9. “The Energetic Universe in Focus: Twenty Years of Science with the *Chandra X-ray Observatory*”, Astronomy Seminar, Dartmouth College, Hanover, NH, 23 April 2019
10. “Uncovering Heavily Obscured AGN with WISE and NuSTAR”, American Astronomical Society Annual Meeting, Washington, DC, 8–12 January 2018
11. “The Hidden Monsters: New Windows on the Cosmic Evolution of Supermassive Black Holes”, Astronomy Seminar, Durham University, UK, 6 December 2017
12. “Resolving the hidden connections between black holes, galaxies, and halos with *Chandra* and *Lynx*”, From *Chandra* to *Lynx*: Taking the Sharpest X-ray Vision Fainter and Farther, Harvard University, 8–10 August 2017
13. “Uncovering the Full Population of Elusive Growing Black Holes with X-ray and Multiwavelength Surveys”, Elusive AGN in the Next Era, George Mason University, Fairfax, VA, 12–15 June 2017

14. “Obscured AGN and the cosmic X-ray background in the era of *NuSTAR*”, Hidden Monsters: Obscured AGN in the Era of *NuSTAR* and *WISE*, Dartmouth College, 8–12 August 2016
15. “AGN synthesis of the cosmic X-ray background with *NuSTAR*”, NERQUAM 2016, Brandeis University, 9 June 2016
16. “Resolving the cosmic X-ray background with *NuSTAR* and *Chandra*”, AAS High Energy Astrophysics Division Meeting, Naples, FL, 4–7 April 2016
17. “The cosmic evolution of galaxies and black holes in the era of precision cosmology”, American Physical Society New England Regional Meeting, Hanover, NH, 6–7 November 2015
18. “The *NuSTAR* survey of the COSMOS field” (in collaboration with F. Civano), AAS 225th Annual Meeting, Seattle, WA, 5–8 January 2015
19. “Spectral energy distributions and photometric redshifts for WISE-selected obscured quasars”, AAS 225th Annual Meeting, Seattle, WA, 5–8 January 2015
20. “Resolving the cosmic X-ray background with *Chandra* and *NuSTAR*”, 15 Years of Science with *Chandra*, Boston, MA, 18-21 November 2014
21. “Black hole variability and the star formation-AGN connection: Do all star-forming galaxies host an AGN?”, AAS HEAD Meeting, Chicago, IL, 18–21 August 2014
22. “The Star Formation-AGN Connection: Do All Star-forming Galaxies Host an AGN?”, NERQUAM 2014, Cambridge, MA, 23 May 2014
23. “*NuSTAR* extragalactic survey simulations”, *NuSTAR* Extragalactic Survey Team Meeting, Durham, UK, 8 April 2014
24. “A first look at the distant high-energy X-ray population with *NuSTAR*”, Presentation to High Energy Group, MPE, Garching, Germany, 17 December 2013
25. “On the cosmic evolution of galaxies and black holes: The simplest possible picture”, Astrophysics Seminar, Durham University, 4 September 2013
26. “Black hole variability and the star formation-AGN connection: Do all star-forming galaxies host an AGN?”, Quasar Tea, Harvard-Smithsonian Center for Astrophysics, Cambridge, MA, 3 May 2013
27. “The beauty of simplicity: Understanding galaxy and black hole evolution”, Astronomy Wednesday Lunch Talk, Princeton University, 6 March 2013
28. “Colors and Composite SEDs of Type 1 and Type 2 Quasars with SDSS, WISE, and GALEX”, AAS Annual Meeting, Long Beach, CA, 6–10 January 2013
29. “AGN variability and the links between star formation and BH growth”, Black Hole Feedback 2012, Dartmouth College, Hanover, NH, 30 July-3 August 2012
30. “Clustering, Halo Mass, and Evolution of Submillimeter Galaxies”, AAS Annual Meeting, Austin, TX, 8–12 January 2012
31. “Black holes and starbursts in the cosmic web”, UK National Astronomy Meeting, Llandudno, Wales, 18 April 2011
32. “Black holes and starbursts in the cosmic web: Clustering and evolution of quasars and submillimeter galaxies”, AAS Annual Meeting, Seattle, 10 January 2011
33. “Black hole accretion modes, host galaxies, and dark matter halos”, Witnesses of Cosmic History: Formation and evolution of black holes, galaxies and their environment, Potsdam, Germany, 21 September 2010

34. “Accreting black holes in the high-redshift Universe: forecasts for the future with the *Wide-Field X-ray Telescope*”, DEX workshop, Edinburgh, UK, 8 September 2010
35. “The edge of detection: The unresolved cosmic X-ray background in the Chandra Deep Fields”, New Results in X-ray Astronomy 2010, Durham, UK, 7 September 2010
36. “Clustering of obscured and unobscured quasars”, What Drives the Growth of Black Holes? international workshop, Durham, UK, 28 July 2010
37. “The *Wide-Field X-ray Telescope*”, The Infrared-X-Ray Connection in Galaxy Evolution, Mullard Space Science Laboratory, 15 July 2010
38. “AGN accretion modes, host galaxies, and environments”, The Infrared-X-Ray Connection in Galaxy Evolution, Mullard Space Science Laboratory, 13 July 2010
39. “The big picture of AGN feedback – black hole accretion and galaxy evolution in multiwavelength surveys”, The Monster’s Fiery Breath: Feedback in Galaxies, Groups, and Clusters, Madison, WI, 1 June 2009
40. “AGN clustering in the Boötes survey”, Boötes Survey Workshop, CCAPP, OSU, Columbus, OH, 28–29 April 2009
41. “Are most low-luminosity AGN really obscured?”, Quasar Tea, Harvard-Smithsonian Center for Astrophysics, 10 April 2009
42. “Massive Halos and Violent Mergers – Exploring Supermassive Black Hole and Galaxy Evolution in the Wide-field Boötes Survey”, IfA Seminar, Royal Observatory Edinburgh, Scotland, 1 April 2009
43. “Massive Halos and Violent Mergers – Exploring Supermassive Black Hole and Galaxy Evolution in the Wide-field Boötes Survey”, Astronomy Seminar, University of the Witwatersrand, Johannesburg, South Africa, 5 March 2009
44. “Accretion in the Universe: From neutron stars to supermassive black holes”, Astronomy Seminar, University of Johannesburg, South Africa, 3 March 2009
45. “Massive Halos and Violent Mergers – Exploring Supermassive Black Hole and Galaxy Evolution in the Wide-field Boötes Survey”, Astronomy Seminar, Durham University, UK, 29 January 2009
46. “Host galaxies, clustering, and evolution of AGN”, The Starburst–AGN Connection Conference, Shanghai, China, 31 October 2008
47. “Clustering and evolution of AGN and galaxies in the Boötes Field”, CCPP Seminar, New York University, 14 October 2008
48. “Clustering of obscured and unobscured quasars”, Postdoc Symposium, Harvard-Smithsonian Center for Astrophysics, Cambridge, MA, 7 October 2008
49. “Clustering and evolution of radio, X-ray, and IR-selected AGN”, YCAA Seminar, Yale University, New Haven, CT, 30 September 2008
50. “Clustering and evolution of radio, X-ray, and IR-selected AGN”, SDSS Symposium, Chicago, IL, 15 August 2008
51. “Host galaxies, clustering, and evolution of radio, X-ray, and IR AGN at  $z < 1$ ”, Radio Galaxies in the *Chandra* Era, Cambridge, MA, 10 July 2008
52. “Host galaxies, clustering, and evolution of radio, X-ray, and IR-selected AGN at  $z < 1$ ”, NERQUAM 2008, Cambridge, MA, 30 May 2008

53. “Obscuration and clustering of AGN in the 9 square degree Boötes survey”, Astronomy Tea Talk, Caltech, 24 March 2008
54. “Obscuration and clustering of AGN in the 9 square degree Boötes survey”, Lunch Talk, Carnegie Observatories, Pasadena, CA, 17 March 2008
55. “Obscured quasars and AGN accretion modes, host galaxies, clustering in the 9 square degree Boötes field”, Thursday Astrophysics Seminar, Columbia University, 7 February 2008
56. “Obscured quasars and AGN accretion modes, host galaxies, clustering in the 9 square degree Boötes field”, Astronomy Wednesday Lunch Talk, Princeton University, 6 February 2008
57. “Obscured quasars and the clustering of active galaxies”, Dissertation talk, AAS Annual Meeting, Austin, TX, 8–11 January 2008
58. “Mid-infrared selected obscured AGN in the Boötes field”, CCAPP Workshop: Active Galactic Nuclei in a Cosmological Context, OSU, Columbus, OH, 1–3 October 2007
59. “Resolving the unresolved cosmic X-ray background in the *Chandra* Deep Fields”, X-ray Surveys Meeting, Rhodes, Greece, 2–6 July 2007
60. “Resolving the unresolved cosmic X-ray background in the *Chandra* Deep Fields”, HEAD Lunch Talk, Harvard-Smithsonian Center for Astrophysics, Cambridge, MA, 9 February 2007
61. “A population of obscured, infrared-selected active galaxies in the Boötes field”, *Chandra* Extragalactic Surveys Workshop, Cambridge, MA, 6–8 November 2006
62. “Identifying a population of obscured, infrared-selected active galaxies in the Boötes field”, AAS HEAD Meeting, San Francisco, CA, 3–7 October 2006
63. “A rich bounty of AGN in the 9 square degree Boötes field: redshift evolution and large-scale structure”, Durham Cosmology Conference: Cosmic Frontiers, Durham, UK, 31 July–4 August 2006
64. “Thousands of AGN in the 9 square degree Boötes field: X-ray and infrared properties”, NERQUAM 2006, Cambridge, MA, 30 May 2006

### Conference posters

1. “*Roman* studies of the dawn of black holes and synergies with *Lynx*”, **Ruan C. Hickox**, (e-poster), Galaxy Formation and Evolution in the Era of the Nancy Grace Roman Space Telescope (virtual meeting), 5–9 October 2020
2. “Mapping the Temperature Profile of the AGN-driven Outflow in NGC1266”, Tusay, N., Lanz, L., Alatalo, K., Nyland, K., Rowlands, K., French, D., Appleton, P., **Hickox, R.**, AAS Annual Meeting, Honolulu, HI, 5–8 January 2020, 207.22
3. “The Puzzling Nuclei of Local Post-Starburst Galaxies”, Lanz, L., Alatalo, K., Aalto, S., French, D., Gallagher, J., **Hickox, R.**, Lohfink, A., Nyland, K., Rowlands, K., AAS Annual Meeting, Honolulu, HI, 5–8 January 2020, 207.19
4. “Compact Starburst Galaxies with Fast Outflows: Constraints on Recent Star Formation and Outflow Properties from Optical Spectroscopy and Multi-Wavelength Photometry”, Bradna, C. A. *et al.*, AAS Annual Meeting, Honolulu, HI, 5–8 January 2020, 111.05
5. “What can bright neutron star binaries tell us about ultra-luminous X-ray pulsars?”, Brumback, M., **Hickox, R.** *et al.* 2019, AAS/High Energy Astrophysics Division, 17, 112.19

6. “AGN obscuration, Eddington ratio distribution and clustering: deep and wide X-ray surveys with NuSTAR and Chandra in the UKIDSS-UDS and Bootes fields”, Masini, A., **Hickox, R.**, Comastri, A., and Civano, F. 2019, AAS/High Energy Astrophysics Division, 17, 106.56
7. “Exploring AGN Structure with Reflection and Reprocessing in Swift/BAT AGN”, Lanz, L., **Hickox, R.C.** et al. 2019, AAS/High Energy Astrophysics Division, 17, 106.42
8. “AGN Synthesis of the Cosmic X-ray Background in the Era of NuSTAR”, **Hickox, R. C.**, Jones, M., and Ananna, T. T. 2019, AAS/High Energy Astrophysics Division, 17, 106.05
9. “Unveiling Star Formation and its Demise in Ultra-compact Post-merger Galaxies using Jansky VLA Continuum Measurements”, Petter, G. et al., American Astronomical Society Meeting 233, 366.05
10. “Mining the Multiwavelength Sky for the Most Heavily Buried Quasars”, **Hickox, R.C.**, Carroll, C. M., and Yan, W. 2019, American Astronomical Society Meeting 233, 243.07
11. “Exploring the dawn of black holes with the *Lynx* X-ray concept mission”, **Hickox, R. C.** on behalf of the *Lynx* STDT, IAU Focus Meeting 13, Vienna, Austria, 20-22 August 2018
12. “The dawn of black holes and their evolution in the early Universe: prospects for the future with *Lynx*”, **Hickox, R. C.**, Are AGN Special?, Durham, UK, 30 July–3 August 2018
13. “AGN hosts and halos in the distant Universe: Prospects for the future with *Lynx*”, **Hickox, R. C.**, NERQUAM, Yale University, 23 May 2018
14. “Compact Starburst Galaxies with Fast Outflows: Spatially Resolved Stellar Mass Profiles”, Gottlieb, S., and 12 colleagues 2018, American Astronomical Society Meeting, 231, 258.05
15. “Public Science Education and Outreach as a Modality for Teaching Science Communication Skills to Undergraduates”, Arion, D., OConnell, C., Lowenthal, J., **Hickox, R. C.**, and Lyons, D. 2018, American Astronomical Society Meeting, 231, 216.04
16. “A flux state comparison of the transient X-ray pulsar SAX J2103.5+4545”, Brumback, M., **Hickox, R.C.** et al. 2017, AAS/High Energy Astrophysics Division, 16, 108.36
17. “Uncovering hidden black holes with extragalactic X-ray surveys”, **Hickox, R. C.** 2017, AAS/High Energy Astrophysics Division, 16, 106.35
18. “The Intrinsic Eddington Ratio Distribution of Active Galactic Nuclei in Young Galaxies from SDSS”, Jones, M. L., **Hickox, R. C.**, Black, C., Hainline, K. N., and DiPompeo, M. A. 2016, AAS/High Energy Astrophysics Division, 15, 106.09
19. “NuSTAR Detection of Multiple Reflections in NGC 1068”, Bauer, F. E., Arevalo, P., Gandhi, P., et al., AAS 225th Annual Meeting, Seattle, WA, 5–8 January 2015, Poster #432.10
20. “The C4 Cluster Abundance Function Using Caustic Mass Estimates”, Gifford, D., Miller, C. J., Kern, N. S., Keimach, A., **Hickox, R. C.**, & Hainline, K. N., AAS 225th Annual Meeting, Seattle, WA, 5–8 January 2015, Poster #252.18
21. “Massive Compact Galaxies with High-velocity Outflows: Morphological Analysis and Constraints on AGN Activity”, Sell, P., Tremonti, C. A., **Hickox, R. C.**, et al., AAS 225th Annual Meeting, Seattle, WA, 5–8 January 2015, Poster #251.10
22. “Skype Me! Astronomers, Students, and Cutting-Edge Research”, **Hickox, Ryan C.** & Gauthier, Adrienne J., AAS Annual Meeting, Boston, MA, 1–5 June 2014
23. “Star formation and substructure in galaxy clusters”, S. A. Cohen, **R. C. Hickox**, G. A. Wegner, M. Einasto, J. Vennik, 2013, AAS Annual Meeting, Washington, DC, 5–9 January 2014

24. “A spectroscopic survey of WISE-selected obscured quasars with SALT”, **Hickox, Ryan C.**, Hainline, K., Myers, A. D., AAS Annual Meeting, Washington, DC, 5–9 January 2014
25. “An elusive X-ray iron absorption line in a candidate recoiling supermassive black hole”, Marchesi, Stefano, Civano, F. M., Lanzuisi, G., Francesca Civano, S. Marchesi, A. Comastri, E. Costantini, M. Elvis, V. Mainieri, **R. Hickox**, K. Jahnke, S. Komossa, E. Piconcelli, C. Vignali, M. Brusa, N. Cappelluti, and A. Fruscione, AAS Annual Meeting, Washington, DC, 5–9 January 2014
26. “The Halo Occupation Distribution of X-ray-Bright Active Galactic Nuclei: A Comparison with Luminous Quasars”, Chatterjee S., Richardson J., Zheng Z., Myers A. & **Hickox R.**, APS April Meeting, Denver, CO, 13–16 April 2013
27. “High-Velocity Outflows from Eddington-Limited Starbursts”, Diamond-Stanic, A. M., Moustakas, J., Tremonti, C. A., Coil, A. L., **Hickox, R. C.**, Sell, P., Robaina, A., Rudnick, G., Geach, J., Canalizo, G., AAS Annual Meeting, Long Beach, CA, 6–10 January 2013
28. “SALT Longslit Spectroscopy of Luminous Obscured Quasars”, Hainline, K., **Hickox, R. C.**, Greene, J. E., AAS Annual Meeting, Long Beach, CA, 6–10 January 2013
29. “Characterizing the Iron K $\alpha$  Line Equivalent Width”, Trouille, L., **Hickox, R. C.**, Alexander, D., AAS Annual Meeting, Long Beach, CA, 6–10 January 2013
30. “The NuSTAR Obscured AGN Observing Program”, Walton, D., Alexander, D., Assef, R., Balokovic, M., Bauer, F. E., Boggs, S. E., Boydston, K., Brandt, W. N., Christensen, F., Comastri, A., Craig, W., Farrah, D., Fiore, F., Hailey, C. J., Harrison, F., **Hickox, R. C.**, Luo, B., Madsen, K., Rigby, J. R., Risaliti, G., Stern, D., Teng, S. H., Veilleux, S., Zhang, W., AAS Annual Meeting, Long Beach, CA, 6–10 January 2013
31. “Extragalactic Surveys with NuSTAR”, Boydston, K., Ajello, M., Alexander, D., Assef, R. J., Ballantyne, D. R., Balokovic, M., Bauer, F. E., Boggs, S. E., Brandt, W. N., Christensen, F., Civano, F. M., Comastri, A., Craig, W., Del Moro, A., Elvis, M., Fiore, F., Hailey, C. J., Harrison, F., Helfand, D. J., **Hickox, R. C.**, LaMassa, S. M., Lansbury, G., Luo, B., Madsen, K., Markwardt, C., Mullaney, J., Puccetti, S., Saez, C., Stern, D., Tagliaferri, G., Treister, E., Urry, C. M., Walton, D., Zhang, W., NuSTAR Science Team, AAS Annual Meeting, Long Beach, CA, 6–10 January 2013
32. “Deep Silicate Features in Compton-thick AGN Arise due to Dust in the Host Galaxy”, Goulding, A. D., Alexander, D. M., Bauer, F., Forman, W. R., **Hickox, R. C.**, Jones, C., Mullaney, J., Trichas, M., AAS Annual Meeting, Long Beach, CA, 6–10 January 2013
33. “Halo Occupation Properties of X-ray AGNs”, Starikova, S., Cool, R., Eisenstein, D., Forman, W. R., Jones, C., **Hickox, R. C.**, Kenter, A., Kochanek, C. S., Kravtsov, A., Murray, S. S., Vikhlinin, A., AAS Annual Meeting, Anchorage, AK, 10–14 June 2012
34. “Composition Of Gas And Dust In Obscured And Unobscured Agn In The Boötes Field”, Usman, S., Murray, S. S., **Hickox, R. C.**, Brodwin, M., AAS Annual Meeting, Anchorage, AK, 10–14 June 2012
35. “Characterizing the Iron K $\alpha$  Line Equivalent Width in Heavily Obscured AGN”, Trouille, L., **Hickox, R.**, Alexander, D., AAS Annual Meeting, Anchorage, AK, 10–14 June 2012
36. “Clustering and halo masses of 870- $\mu$ m selected submm galaxies”, **Hickox, R. C.**, Wardlow, J. L., Myers, A. D., Smail, I. and the LESS Collaboration, Galaxy Formation, Durham, 18–22 July 2011
37. “Clustering and halo masses of 870- $\mu$ m selected submm galaxies”, **Hickox, R. C.**, Wardlow, J. L., Myers, A. D., Smail, I. and the LESS Collaboration, Unveiling the Far-IR and Sub-mm Extragalactic Universe: Herschel, ALMA, CCAT, SPICA, and Beyond, Irvine, CA, 12–14 May 2011



38. “Understanding the growth and evolution of supermassive black holes with the *Wide-Field X-ray Telescope*”, Sivakoff, G. R., Gilli, R., Brandt, W. N., **Hickox, R. C.**, Murray, S. S. and the *WFXT* Team, AAS Annual Meeting, Washington, DC, 3–7 January 2010
39. “Constraining the outburst properties of the SMBH in Fornax A through X-ray, infrared, and radio observations”, Lanz, L., Jones, C., Forman, W. R., Ashby, M. L. N., Kraft, R. & **Hickox, R. C.**, AAS Annual Meeting, Washington, DC, 3–7 January 2010
40. “*Suzaku* X-ray spectra and pulse profile variations during the superorbital cycle of LMC X-4”, Hung, L.-W., **Hickox, R. C.**, Boroson, B. S., Vrtilik, S. D., AAS Annual Meeting, Washington, DC, 3–7 January 2010
41. “Optically obscured accretion in  $z \sim 0.5$  galaxies”, **Hickox, R. C.**, Assef, R. J., Kochanek, C. S., Murray, S. S., Jones, C., Forman, Satyam, V., Vikhlinin, A. and the XBoötes, AGES, NDWFS, IRAC Shallow Survey, Boötes MIPS, & FLAMEX Teams, *Chandra’s* First Decade of Discovery, Boston, MA, 22–25 September 2009
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