

Curriculum Vitae
CHRISTOPHER ALAN ONKEN

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PERSONAL DATA

Born: 14 August 1978; Springfield, Illinois, U.S.A.
Citizenship: U.S.A.

EXPERIENCE

Deputy Australian Gemini Scientist. Mount Stromlo Observatory.	2008—Present
Plaskett Fellow. Herzberg Institute of Astrophysics.	2005—2008
Graduate Research and Teaching Assistant. The Ohio State University.	2000—2005
Lab Instructor (Introductory Astronomy). University of Minnesota.	1999—2000
Undergraduate Summer Student Program. Space Telescope Science Institute.	1999
Research Experiences for Undergraduates Program. Northern Arizona University.	1998

EDUCATION

Ph.D. Astronomy. The Ohio State University.	2005
“Measurement of Black Hole Masses in Active Galactic Nuclei” Adviser: Prof. Bradley M. Peterson	
M.S. Astronomy. The Ohio State University.	2002
B.S. Astrophysics (<i>summa cum laude</i>). University of Minnesota.	2000
“The Search for Large-Scale Magnetic Field Structure in the Milky Way Galaxy” Adviser: Prof. John M. Dickey	
B.S. Physics (<i>magna cum laude</i>). University of Minnesota.	2000

AWARDS & HONORS

Plaskett Fellowship. Herzberg Institute of Astrophysics.	2005
Distinguished University Fellowship. The Ohio State University.	2000
Asteroid “1998 MZ7” designated “12868 Onken”.	1999

TELESCOPE EXPERIENCE

Siding Spring Observatory - 2.3m
Dominion Astrophysical Observatory - 1.85m
Gemini Observatory - North, South
W.M. Keck Observatory - Keck I
MMT Observatory
Hubble Space Telescope
MDM Observatory - 1.3m, 2.4m
Cerro Tololo Inter-American Observatory - 0.9m, 4m
Kitt Peak National Observatory - 4m
South African Astronomical Observatory - 1m
Lowell Observatory - 0.6m

REFEREED PUBLICATIONS

16. *Diverse Kinematic Signatures from Reverberation Mapping of the Broad-Line Region in AGNs.*
Denney, K.D., Peterson, B.M., Pogge, R.W., Adair, A., Atlee, D.W., Au-Yong, K., Bentz, M.C., Bird, J.C., Brokofsky, D.J., Chisholm, E., Comins, M.L., Dietrich, M., Doroshenko, V.T., Eastman, J.D., Efimov, Y.S., Ewald, S., Ferbey, S., Gaskell, C.M., Hedrick, C.H., Jackson, K., Klimanov, S.A., Klimek, E.S., Kruse, A.K., Lad route, A., Lamb, J.B., Leighly, K., Minezaki, T., Nazarov, S.V., **Onken, C.A.**, Petersen, E.A., Peterson, P., Poindexter, S., Sakata, Y., Schlesinger, K.J., Sergeev, S.G., Skolski, N., Stieglitz, L., Tobin, J.J., Unterborn, C., Vestergaard, M., Watkins, A.E., Watson, L.C., & Yoshii, Y. 2009, *The Astrophysical Journal*, 704, L80.
15. *An Improved Method for Using Mg II to Estimate Black Hole Masses in Active Galactic Nuclei.*
Onken, C.A., & Kollmeier, J.A. 2008, *The Astrophysical Journal*, 689, L13.
14. *The Black Hole Mass of NGC 4151: Comparison of Reverberation Mapping and Stellar Dynamical Measurements.*
Onken, C.A., Valluri, M., Peterson, B.M., Pogge, R.W., Bentz, M.C., Ferrarese, L., Vestergaard, M., Crenshaw, D.M., Sergeev, S.G., McHardy, I.M., Merritt, D., Bower, G.A., Heckman, T.M., & Wandel, A. 2007, *The Astrophysical Journal*, 670, 105.
13. *NGC 5548 in a Low-Luminosity State: Implications for the Broad-Line Region.*
Bentz, M.C., Denney, K.D., Cackett, E.M., Dietrich, M., Fogel, J.K.J., Ghosh, H., Horne, K.D., Kuehn, C., Minezaki, T., **Onken, C.A.**, Peterson, B.M., Pogge, R.W., Pronik, V.I., Richstone, D.O., Sergeev, S.G., Vestergaard, M., Walker, M.G., & Yoshii, Y. 2007, *The Astrophysical Journal*, 662, 205.
12. *The Mass of the Black Hole in the Seyfert 1 Galaxy NGC 4593 from Reverberation Mapping.*
Denney, K.D., Bentz, M.C., Peterson, B.M., Pogge, R.W., Cackett, E.M., Dietrich, M., Fogel, J.K.J., Ghosh, H., Horne, K.D., Kuehn, C., Minezaki, T., **Onken, C.A.**, Pronik, V.I., Richstone, D.O., Sergeev, S.G., Vestergaard, M., Walker, M.G., & Yoshii, Y. 2006, *The Astrophysical Journal*, 653, 152.
11. *A Reverberation-based Mass for the Central Black Hole in NGC 4151.*
Bentz, M.C., Denney, K.D., Cackett, E.M., Dietrich, M., Fogel, J.K.J., Ghosh, H., Horne, K., Kuehn, C., Minezaki, T., **Onken, C.A.**, Peterson, B.M., Pogge, R.W., Pronik, V.I., Richstone, D.O., Sergeev, S.G., Vestergaard, M., Walker, M.G., & Yoshii, Y. 2006, *The Astrophysical Journal*, 651, 775.
10. *Black Hole Masses and Eddington Ratios at $0.3 < z < 4$.*
Kollmeier, J.A., **Onken, C.A.**, Kochanek, C.S., Gould, A., Weinberg, D.H., Dietrich, M., Cool, R., Dey, A., Eisenstein, D.J., Jannuzi, B.T., Le Floch, E., & Stern, D. 2006, *The Astrophysical Journal*, 648, 128.
9. *The Mass of the Central Black Hole in the Seyfert Galaxy NGC 4151.*
Metzroth, K.G., **Onken, C.A.**, & Peterson, B.M. 2006, *The Astrophysical Journal*, 647, 901.

8. *The Radius–Luminosity Relationship for Active Galactic Nuclei: The Effect of Host-Galaxy Starlight on Luminosity Measurements.*
Bentz, M.C., Peterson, B.M., Pogge, R.W., Vestergaard, M., & **Onken, C.A.** 2006, *The Astrophysical Journal*, 644, 133.
7. *Supermassive Black Holes in Active Galactic Nuclei. II. Calibration of the Black Hole Mass–Velocity Dispersion Relationship for Active Galactic Nuclei.*
Onken, C.A., Ferrarese, L., Merritt, D., Peterson, B.M., Pogge, R.W., Vestergaard, M., & Wandel, A. 2004, *The Astrophysical Journal*, 615, 645.
6. *Central Masses and Broad-Line Region Sizes of Active Galactic Nuclei. II. A Homogeneous Analysis of a Large Reverberation-Mapping Database.*
Peterson, B.M., Ferrarese, L., Gilbert, K.M., Kaspi, S., Malkan, M.A., Maoz, D., Merritt, D., Netzer, H., Onken, C.A., Pogge, R.W., Vestergaard, M., & Wandel, A. 2004, *The Astrophysical Journal*, 613, 682.
5. *History of Hydrogen Reionization in the Cold Dark Matter Model.*
Onken, C.A., & Miralda-Escudé, J. 2004, *The Astrophysical Journal*, 610, 1.
4. *Black Hole Masses in Three Seyfert Galaxies.*
Onken, C.A., Peterson, B.M., Dietrich, M., Robinson, A., & Salamanca, I.M. 2003, *The Astrophysical Journal*, 585, 121.
3. *Steps toward Determination of the Size and Structure of the Broad-Line Region in Active Galactic Nuclei. XVI. A 13 Year Study of Spectral Variability in NGC 5548.*
Peterson, B.M., Berlind, P., Bertram, R., Bischoff, K., Bochkarev, N.G., Borisov, N., Burenkov, A.N., Calkins, M., Carrasco, L., Chavushyan, V.H., Chornock, R., Dietrich, M., Doroshenko, V.T., Ezhkova, O.V., Filippenko, A.V., Gilbert, A.M., Huchra, J.P., Kollatschny, W., Leonard, D.C., Li, W., Lyuty, V.M., Malkov, Y.F., Matheson, T., Merkulova, N.I., Mikhailov, V.P., Modjaz, M., **Onken, C.A.**, Pogge, R.W., Pronik, V.I., Qian, B., Romano, P., Sergeev, S.G., Sergeeva, E.A., Shapovalova, A.I., Spiridonova, O.I., Tao, J., Tokarz, S., Valdes, J.R., Vlasniuk, V.V., Wagner, R.M., & Wilkes, B.J. 2002, *The Astrophysical Journal*, 581, 197.
2. *The Mass of the Central Black Hole in the Seyfert Galaxy NGC 3783.*
Onken, C.A., & Peterson, B.M. 2002, 572, 746.
1. *CCD Photometry of the Globular Cluster NGC 5986 and Its Post-Asymptotic Giant Branch and RR Lyrae Stars.*
Alves, D.R., Bond, H.E., & **Onken, C.A.** 2001, *The Astronomical Journal*, 121, 318.

CONFERENCE PROCEEDINGS

10. *Reverberation Mapping Results from MDM Observatory.*
Denney, K.D., Peterson, B.M., Pogge, R.W., Bentz, M.C., Gaskell, C.M., Minezaki, T., **Onken, C.A.**, Sergeev, S.G., & Vestergaard, M. 2009, in Co-Evolution of Central Black Holes and Galaxies, eds. B.M. Peterson, R.S. Somerville, & T. Storchi-Bergmann, IAU Symposium, 267.
9. *AGES-II Black Hole Masses and Eddington Ratios.*
Onken, C.A., Kollmeier, J.A., & The AGES Team 2007, BAAS, 2008 Winter Meeting.

8. *The Black Hole Mass and Eddington Ratio Distributions of the 2QZ.*
Onken, C.A., & Kollmeier, J.A. 2006, BAAS, 2007 Winter Meeting.
7. *Calibration of the M–sigma Relation for AGNs.*
Onken, C.A. 2004, BAAS, 2005 Winter Meeting.
6. *Determining the Zero-Point Calibration for AGN Black Hole Mass Estimates.*
Onken, C.A., Ferrarese, L., Merritt, D., Peterson, B.M., Pogge, R.W., Vestergaard, M., & Wandel, A. 2004, in The Interplay among Black Holes, Stars, and ISM in Galactic Nuclei, eds. T. Storchi Bermann, L.C. Ho, & H.R. Schmitt, IAU Symposium, 222, 109.
5. *Zero-Point Calibration for AGN Black-Hole Mass Estimates.*
Peterson, B.M., & Onken, C.A. 2004, in AGN Physics with the Sloan Digital Sky Survey, eds. G.T. Richards & P.B. Hall, ASP Conference Series, 311, 75.
4. *Photometric Selection of Local Group Post-AGB Stars.*
Onken, C.A., & Chanamé, J. 2003, in The Local Group as an Astrophysical Laboratory, eds. M. Livio & T.M. Brown, p. 72.
3. *A Supermassive Black Hole in the Seyfert 1 Galaxy NGC 3783.*
Onken, C.A. 2001, BAAS, 2002 Winter Meeting.
2. *Two Post-AGB A-F Stars in the Globular Cluster NGC 5986.*
Bond, H.E., Alves, D.R., & Onken, C. 2000, BAAS, 2000 Summer Meeting.
1. *A Straw-Man Model of the Galactic Magnetic Field.*
Dickey, J.M., Onken, C.A., McClure-Griffiths, N.M., Gaensler, B.M., Green, A.J., Haynes, R.F., & Wieringa, M.H. 2000, in Radio Polarization: A New Probe of the Galaxy, ed. T.L. Landecker, p. 43.

OTHER PUBLICATIONS

- “1998 QH2”, 1998, Minor Planet Electronic Circ., 1998-Q21.
 “1998 PG”, 1998, Minor Planet Electronic Circ., 1998-P13.
 “1998 PF”, 1998, Minor Planet Electronic Circ., 1998-P12.
 “1998 ME3”, 1998, Minor Planet Electronic Circ., 1998-M15.
 “1998 MQ”, 1998, Minor Planet Electronic Circ., 1998-M08.

RESEARCH TALKS

Seminars and Invited Talks:

Observatories of the Carnegie Institution, Pasadena, California.	2009 Aug
Research School of Astronomy & Astrophysics, Canberra, Australia.	2009 Apr
Gemini-South, La Serena, Chile.	2009 Feb
<i>Active Galactic Nuclei in the Cosmological Context</i> , Center for Cosmology and AstroParticle Physics, The Ohio State University, Columbus, Ohio.	2007 Oct
<i>50th Anniversary Celebration of Sidney van den Bergh’s Ph.D.</i> , Herzberg Institute of Astrophysics, Victoria, Canada.	2006 Feb
Herzberg Institute of Astrophysics, Victoria, Canada.	2005 Nov

Contributed Talks:

Astronomical Society of Australia, Melbourne, Australia.	2009 Jul
American Astronomical Society, Austin, Texas.	2008 Jan
American Astronomical Society, Seattle, Washington.	2007 Jan
American Astronomical Society, San Diego, California.	2005 Jan
<i>The Central Parsec of Galaxies</i> , Max-Planck-Institut für Astronomie, Heidelberg, Germany.	2004 Oct

SUPERVISORY ROLES

Bonnie Zhang, ANU Summer Scholarship & Ph.B. Advanced Studies Course, 2010.

Kaitlin Cook, National Research Scholarship, 2009. Co-supervised with Dr. Amanda Karakas (RSAA).

“An Investigation into Sagittarius A* and its Orbiting Stars”

PROFESSIONAL SERVICE ACTIVITIES

Convener, Feast-of-Facts talk series, RSAA. 2009 Jun – Present.

Presenter, ANU Summer Scholars talk series, RSAA. 2008.

Co-Creator, Summer Paper Session, HIA. 2008.

Member, IT User Group, HIA. 2007-2008.

Convener, Tuesday Extragalactic Discussion, HIA. 2007-2008.

Convener, Grassroots talk series, HIA. 2006-2007.

Member, Science Travel Committee, HIA. 2006-2008.

Co-coordinator, Colloquium series, HIA. 2005-2008.

Memberships: American Astronomical Society (since 2001)
Astronomical Society of Australia (since 2008)

Manuscripts Reviewed for: AJ, ApJ, ApJS, A&A, MNRAS.

PUBLIC OUTREACH ACTIVITIES

Coordinator, Australian Gemini School Astronomy Contest. 2009, 2010.

Presenter, National Youth Science Forum visits, RSAA, 2010.

Presenter, Student Outreach Group, RSAA. 2009.

Presenter, “Ask a Professional Astronomer” booth, Astronomy Day, HIA. 2008.

Public Talks:

Village Green, East Dundee, Illinois.	2009 Aug
Royal Astronomical Society of Canada—Victoria Centre, Victoria, Canada.	2006 Jun