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Education

- 2000-2004 Harvard University, Cambridge, MA
PhD, Astronomy, June 2004
Thesis: “Understanding Dim Globular Cluster X-ray Sources” with Prof. Jonathan E. Grindlay.
- 2000-2002 Harvard University, Cambridge, MA
AM, Astronomy, Nov. 2002
Research Exam: “Constraining the mass and radius of quiescent accreting neutron stars in 47 Tuc” with Prof. J. Grindlay.
- 1993-1997 Carleton College, Northfield, MN
BA, Physics, June 1997, *magna cum laude*
Undergraduate Thesis: “Type Ia Supernovae” with advisor Prof. Cindy Blaha.

Positions

- 2004- Lindheimer Postdoctoral Fellow (Northwestern University)
- 2000-2004 Graduate Student and Research Assistant (Harvard University)
- 2000-2004 Teaching Fellow (Harvard University, 3 semesters)
- 1997-1999 U.S. Peace Corps Volunteer (Euthini Community Day Secondary School, Euthini, Malaŵi, Central Africa)
- 1996 Summer Research Student (NRAO Very Large Array)
- 1994-1997 Teaching Assistant (Carleton College Physics Dept.)

Honors

- 2004 Certificate of Distinction in Teaching (Graduate School of Arts and Sciences, Harvard University)
- 2004 Fireman Award for Doctoral Dissertation (Astronomy Dept., Harvard University)
- 1997 Distinction in Major (Carleton College)

Refereed Publications

- Heinke, C. O.**, Grindlay, J. E., Edmonds, P. D., Cohn, H. N., Lugger, P. M., Camilo, F., Bogdanov, S., & Freire, P. C., “A Deep Chandra Survey of the Globular Cluster 47 Tuc: Catalog of Point Sources”, 2005, ApJ in press, (astro-ph/0503132)
- Heinke, C. O.**, Grindlay, J. E., & Edmonds, P. D., “Three Additional Quiescent Low-Mass X-ray Binary Candidates in 47 Tucanae”, 2005, ApJ in press, (astro-ph/0412137)
- Cackett, E. M., Wijnands, R., **Heinke, C. O.**, Edmonds, P. D., Lewin, W. H. G., Pooley, D., Grindlay, J. E., Jonker, P. G., Miller, J. M., “X-Ray Variability during the Quiescent State of the Neutron Star X-Ray Transient in the Globular Cluster NGC 6440”, 2005, ApJ, 620, 922
- Wijnands, R., Homan, J., **Heinke, C. O.**, Miller, J. M.; Lewin, W. H. G., “Chandra Observations of the Accretion-driven Millisecond X-Ray Pulsars XTE J0929-314 and XTE J1751-305 in Quiescence”, 2005, ApJ, 619, 492
- Wijnands, R., **Heinke, C. O.**, Pooley, D., Edmonds, P. D., Lewin, W. H. G., Grindlay, J. E., Jonker, P., Miller, J. M., “The hard quiescent spectrum of the neutron-star X-ray transient EXO 1745-248 in the globular cluster Terzan 5”, 2005, ApJ, 618, 883
- Haggard, D., Cool, A. M., Anderson, J., Edmonds, P. D., Callanan, P. J., **Heinke, C. O.**, Grindlay, J. E., Bailyn, C. D. “Hubble Space Telescope Advanced Camera for Surveys Imaging of ω Centauri: Optical Counterpart for the Quiescent Low-Mass X-Ray Binary”, 2004, ApJ, 613, 512
- Edmonds, P. D., Kahabka, P. & **Heinke, C. O.**, “*HST* Discovery of an Optical Counterpart to the Supersoft X-ray Source in the Globular Cluster M3”, 2004, ApJ, 611, 413
- Heinke, C. O.**, Grindlay, J. E., Edmonds, P. D., Lloyd, D. A., Murray, S. S., Cohn, H. N., & Lugger, P. M., “A *Chandra* Study of the Globular Cluster M80”, 2003, ApJ, 598, 516
- Heinke, C. O.**, Grindlay, J. E., Lugger, P. M., Cohn, H. N., Edmonds, P. D., Lloyd, D. A., & Cool, A. M., “Analysis of the Quiescent Low-Mass X-ray Binary Population in Globular Clusters”, 2003, ApJ, 598, 501
- Edmonds, P. D., Gilliland, R. L., **Heinke, C. O.**, & Grindlay, J. E., “An Extensive Census of *HST* Counterparts to *Chandra* X-ray Sources in the Globular Cluster 47 Tucanae. II. Time Series and Analysis”, 2003, ApJ, 596, 1197
- Edmonds, P. D., Gilliland, R. L., **Heinke, C. O.**, & Grindlay, J. E., “An Extensive Census of *HST* Counterparts to *Chandra* X-ray Sources in the Globular Cluster 47 Tucanae. I. Astrometry and Photometry”, 2003, ApJ, 596, 1177
- Heinke, C. O.**, Grindlay, J. E., Edmonds, P. D., Lloyd, D. A., Cohn, H. N., & Lugger, P. M. “A *Chandra* Study of the Globular Cluster Terzan 5”, 2003, ApJ, 590, 809.

- Heinke, C. O.**, Grindlay, J. E., Lloyd, D. A., & Edmonds, P. D., “X-ray Studies of Two Neutron Stars in 47 Tucanae: Toward Constraints on the Equation of State”, 2003, *ApJ*, 588, 452.
- Grindlay, J. E., Camilo, F., **Heinke, C. O.**, Edmonds, P. D., Cohn, H., & Lugger, P. “*Chandra* Study of a Complete Sample of Millisecond Pulsars in 47 Tucanae and NGC 6397”, 2002, *ApJ*, 581, 470.
- Edmonds, P. D., Gilliland, R. L., Camilo, F., **Heinke, C. O.**, & Grindlay, J. E., “A Millisecond Pulsar Optical Counterpart with Large-Amplitude Variability in the Globular Cluster 47 Tucanae”, 2002, *ApJ*, 579, 741.
- Wijnands, R., **Heinke, C. O.**, & Grindlay, J. E., “A *Chandra* Observation of the Globular Cluster Terzan 1: The Neutron Star X-Ray Transient X1732-304 in Quiescence”, 2002, *ApJ*, 572, 1002.
- Edmonds, P. D., **Heinke, C. O.**, Grindlay, J. E., & Gilliland, R. L., “*Hubble Space Telescope* Detection of a Quiescent Low-Mass X-Ray Binary Companion in 47 Tucanae”, 2002, *ApJ*, 564, L17.
- Grindlay, J. E., **Heinke, C. O.**, Edmonds, P. D., Murray, S. S., & Cool, A. M., “*Chandra* Exposes the Core-collapsed Globular Cluster NGC 6397”, 2001, *ApJ*, 563, L53.
- Heinke, C. O.**, Edmonds, P. D., & Grindlay, J. E., “Identification of the Low-Mass X-Ray Binary and Faint X-Ray Sources in NGC 6652”, 2001, *ApJ*, 562, 363.
- Edmonds, P. D., Gilliland, R. L., **Heinke, C. O.**, Grindlay, J. E., & Camilo, F., “Optical Detection of a Variable Millisecond Pulsar Companion in 47 Tucanae”, 2001, *ApJ*, 557, L57.
- Grindlay, J. E., **Heinke, C.**, Edmonds, P. D., & Murray, S. S., “High-Resolution X-ray Imaging of a Globular Cluster Core: Compact Binaries in 47Tuc”, 2001, *Science*, 292, 2290.

Submitted Publications

- Bogdanov, S., Grindlay, J. E., **Heinke, C. O.**, Camilo, F., & Becker, W., “Deep X-ray Observations of Radio Millisecond Pulsars in the Globular Cluster 47 Tucanae”, 2005, *ApJ*, submitted.
- Cody, A. M., Grindlay, J. E., Edmonds, P. D., & **Heinke, C. O.**, “Optical Candidate Constraints for a *Chandra* X-ray Source in Terzan 1”, 2003, *AJ*, submitted.

Conference Proceedings

- Heinke, C. O.**, Grindlay, J. E., Edmonds, P. D., Cohn, H. N., Lugger, P. M., Camilo, F., Bogdanov, S., & Freire, P. C., “X-ray Binaries in the Globular Cluster 47 Tucanae”, 2005, in “Interacting Binaries: Accretion, Evolution and Outcomes”, AIP, eds. L. Antonelli et al.

Heinke, C. O., Grindlay, J. E., Edmonds, P. D., & Camilo, F. “X-ray and Optical Studies of Millisecond Pulsars in 47 Tucanae”, 2003, ASP Conf. Ser. 302: “Radio Pulsars”, 367, eds. M. Bailes et al.

Heinke, C. O., Grindlay, J. E., Lloyd, D. A., & Edmonds, P. D. “Variability and Spectra of Two Neutron Stars in 47 Tucanae”, 2002, ASP Conf. Ser. 271: “Neutron Stars in Supernova Remnants”, 349, eds. P. Slane & B. Gaensler

Grindlay, J. E., **Heinke, C. O.**, Edmonds, P. D., & Camilo, F. “*Chandra* on Millisecond Pulsars in Globular Clusters”, 2002, ASP Conf. Ser. 271: “Neutron Stars in Supernova Remnants”, 343, eds. P. Slane & B. Gaensler