
CONTACT	Univ. of Washington ··· Department of Astronomy 3910 15th Ave NE ··· Seattle, WA 98195 – U.S.A. rodluger@uw.edu ··· staff.washington.edu/rodluger/	
EDUCATION	University of Washington , Seattle, WA ··· PhD Astronomy & Astrobiology, August 2017 ··· MSc Astronomy, December 2013	2012 - 2017
	Swarthmore College , Swarthmore, PA ··· BA Astrophysics / English Literature minor, May 2010	2006 - 2010
	American School of Campinas , Campinas, Brazil	2002 - 2006
RESEARCH EXPERIENCE	Researcher , Virtual Planet Laboratory @ UW ··· Research with Profs. Eric Agol, Rory Barnes, and Victoria Meadows ··· Develop photometric de-trending methods to aid in the search for small planets transiting small stars ··· Develop techniques to characterize potentially habitable exoplanets with next-generation telescopes ··· Investigate the atmospheric evolution of planets orbiting M dwarfs	2012 -
	Student Researcher , Swarthmore College ··· Research under Professor Eric Jensen on planet formation and T Tauri disks	2008 - 2009
SELECTED PUBLICATIONS	Luger, R. , Sestovic, M., Kruse, E., et al. (2017) <i>A seven-planet resonant chain in TRAPPIST-1</i> . Nature Astronomy 1, 0129 Luger, R. , Kruse, E., Foreman-Mackey, D., Agol, Eric, and Saunders, Nicholas. (2017) <i>An update to the EVEREST K2 pipeline: Short cadence, saturated stars, and Kepler-like photometry down to Kp = 15</i> . arXiv:1702.05488. Luger, R. , Lustig-Yaeger, J., Fleming, D. P., Tilley, M. A., Agol, E., Meadows, V. S., Deitrick, R., and Barnes, R. (2017) <i>The Pale Green Dot: A Method to Characterize Proxima Centauri b using Exo-Aurorae</i> . ApJ 837, 63. Meadows, V. S., Arney, G. N., Schwieterman, E. W., Lustig-Yaeger, J., Lincowski, A. P., Robinson, T., Domagal-Goldman, S. D., Barnes, R. K., Fleming, D. P., Deitrick, R., Luger, R. , Driscoll, P. E., Quinn, T. R., and Crisp, D. (2016) <i>The Habitability of Proxima Centauri b: II: Environmental States and Observational Discriminants</i> . arXiv:1608.08620. Barnes, R., Deitrick, R., Luger, R. , Driscoll, P. E., Quinn, T. R., Fleming, D. P., Guyer, B., McDonald, D. V., Meadows, V. S., Arney, G., Crisp, D., Domagal-Goldman, S. D., Lincowski, A., Lustig-Yaeger, J., and Schwieterman, E. (2016) <i>The Habitability of Proxima Centauri b I: Evolutionary Scenarios</i> . arXiv:1608.06919. Luger, R. , Agol, E., Kruse, E., Barnes, R., Becker, A., Foreman-Mackey, D., and Deming, D. (2016) <i>EVEREST: Pixel Level Decorrelation of K2 Light curves</i> . AJ	

152, 100.

Schwieterman, E. W., Meadows, V. S., Domagal-Goldman, S. D., Deming, D., Arney, G. N., **Luger, R.**, Harman, C. E., Misra, A., and Barnes, R. (2016) *Identifying Planetary Biosignature Impostors: Spectral Features of CO and O₄ Resulting from Abiotic O₂/O₃ Production*. ApJL 819, 13.

Luger, R. and Barnes, R. (2015) *Extreme Water Loss and Abiotic O₂ Buildup on Planets Throughout the Habitable Zones of M Dwarfs*. Astrobiology 15, 119.

Luger, R., Barnes, R., Lopez, E., Fortney, J., Jackson, B., and Meadows, S. (2015) *Habitable Evaporated Cores: Transforming Mini-Neptunes into Super-Earths in the Habitable Zones of M Dwarfs*. Astrobiology 15, 57.

Deitrick, R., Barnes, R., McArthur, B., Quinn, T., **Luger, R.**, Antonsen, A., and Benedict, G. (2014) *The Three-dimensional Architecture of the ν Andromedae Planetary System* ApJ 798, 46.

HONORS AND AWARDS

ARCS Fellowship **2012 - 2014**
Achievement Rewards for College Scientists Foundation Fellowship recipient

Bobby Berman Memorial Prize **May 2010**
Awarded to a graduating senior who has shown achievement, commitment, and leadership in Physics and Astronomy

The Phi Beta Kappa Society **May 2010**
Inducted member

TEACHING EXPERIENCE

Teacher, St. Luke's School, New Canaan, CT **2010 - 2012**
... Created and taught a rigorous, college-level elective course in astrophysics aimed at seniors interested in pursuing college classes in the field
... Taught three sections of an 11th grade physics class with a focus on astronomy, aiming to help students develop critical thinking and creative problem solving skills

Science Associate & Tutor, Swarthmore College **2009 - 2010**
... Directed weekly large-group study sessions for an introductory course in astronomy; tutored students in courses in mechanics and E&M

WORK EXPERIENCE

IT Manager, Virtual Planet Laboratory @ UW **2013 - 2017**
... Managed VPL's virtual conferencing system and network

LEADERSHIP

Head Coach, St. Luke's School **2010 - 2012**
... Head coach of the JV Boys Soccer and Fencing Teams
... Assistant coach of the MS Tennis Team

Captain, Swarthmore College Fencing Team **2009 - 2010**
... Captain and founding member of the Sabre Team