

# CURRICULUM VITAE

Alexander P. Stephan

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CONTACT INFORMATION	The Ohio State University Department of Astronomy McPherson Laboratory 140 West 18th Avenue Columbus, Ohio 43210-1173	<i>E-mail:</i> stephan.98@osu.edu <i>web:</i> www.alexanderpstephan.com
RESEARCH INTERESTS	Dynamics of planetary systems, evolving stellar systems, black hole systems and massive black hole environments. Focused on theory and computation.	
EDUCATION	<b>2020:</b> Ph.D. in Astronomy & Astrophysics, UCLA, Advisor: Prof. Smadar Naoz <b>2016:</b> M.Sc. in Astronomy, UCLA, Advisor: Prof. Smadar Naoz <b>2014:</b> B.A. in Physics with a Specialization in Astrophysics, The University of Chicago, Advisor: Prof. Michael Gladders	
PROFESSIONAL	<b>2020 –</b> : CCAPP Affiliate Fellow, Center for Cosmology and Astroparticle Physics, The Ohio State University <b>2020 –</b> : Buckeye Prize Postdoctoral Fellow, Department of Astronomy, The Ohio State University <b>2014 – 2020:</b> Graduate Student Researcher & Teaching Assistant, Department of Physics and Astronomy, UCLA <b>2011 – 2014:</b> Undergraduate Research Assistant, Department of Astronomy and Astrophysics, The University of Chicago	
HONORS AND AWARDS	<b>2020, January:</b> Rodger Doxsey Travel Prize for the 235th AAS Meeting, Honolulu, HI <b>2018, June:</b> Michael A. Jura Memorial 2018 Graduate Award, Department of Physics and Astronomy, UCLA <b>2014, June:</b> Bachelor of Arts with General Honors, Bachelor of Arts in Physics with a Specialization in Astrophysics with Honors, University of Chicago	
MENTORING	<b>UCLA Undergraduate Student Mentees:</b> <ul style="list-style-type: none"><li>• <b>Cheryl Wang:</b> GW signals in the Galactic Center, Fall 2019 – Fall 2020</li><li>• <b>Shelley Cheng:</b> Triple stars, Summer 2018 – Spring 2020</li><li>• <b>Isabella Goetting:</b> Gas giant spin evolution, Summer 2017 – Fall 2018</li><li>• <b>Paul Denham:</b> Multi-planet system dynamics, Summer 2017 – Summer 2018</li></ul> <b>REU Student Mentees:</b> <ul style="list-style-type: none"><li>• <b>Joseph Guzman:</b> Triple star dynamics, Summer 2016</li></ul>	
TEACHING EXPERIENCE	<b>As Teaching Assistant or Special Reader at UCLA:</b> <ul style="list-style-type: none"><li>• ASTR 3: Nature of the Universe</li><li>• ASTR 5: Life in the Universe</li><li>• PHYS 17: Elements of Quantum Mechanics and Statistical Mechanics</li><li>• PHYS 18L: Modern Physics Laboratory</li><li>• PHYS 105A: Analytical Mechanics</li><li>• ASTR 273: Diffuse Matter in Space</li></ul>	
OUTREACH	<b>Astronomy Live!:</b> Astronomy graduate student-run outreach group at UCLA, visiting LA schools to showcase science demos. <ul style="list-style-type: none"><li>• Volunteer: 2014 – 2020</li><li>• Outreach group coordinator: 2015 – 2018</li></ul> <b>Exploring Your Universe:</b> Large public science fair organized by UCLA STEM graduate students yearly in November.	

- Volunteer: 2014 – 2020
- Organization committee member: 2015 & 2016

#### IN THE MEDIA

**About “Eating Planets for Lunch and Dinner: Signatures of Planet Consumption by Evolving Stars”, Stephan et al. 2020:**

- New Scientist article, 20 Sept 2019, by Leah Crane

**About “The Fate of Binaries in the Galactic Center: The Mundane and the Exotic”, Stephan et al. 2019:**

- AAS Nova Highlight, 21 June 2019, id.5364, by Kerry Hensley

**About “A-type Stars, the Destroyers of Worlds: The lives and deaths of Jupiters in evolving stellar binaries”, Stephan et al. 2018:**

- Nature Research Highlight, 6 Sept 2018

**About “Throwing Icebergs at White Dwarfs”, Stephan et al. 2017:**

- Physics Today, vol. 70, issue 10, pp. 30-30, by Charles Day
- AAS Nova Highlight, 28 Jul 2017, id.2541, by Susanna Kohler

#### PUBLICATIONS

**Stephan, A.P.**, Naoz, S., Gaudi, B.S., “Giant Planets, Tiny Stars: Producing Short-Period Planets around White Dwarfs with the Eccentric Kozai-Lidov Mechanism”, 2020, arXiv:2010.10534

Ciurlo, A., Campbell R., Morris, M.R., Do, T., Ghez, A.M., Hees, A., Sitarski, B.N., Kosmo O’Neil, K., Chu, D.S., Martinez, G.D., Naoz, S., **Stephan, A.P.**, “A Population of Dust-Enshrouded Objects Orbiting the Galactic Black Hole”, 2020, Nature, 577, 7790, 337–340

**Stephan, A.P.**, Naoz, S., Gaudi, B.S., Salas, J.M., “Eating Planets for Lunch and Dinner: Signatures of Planet Consumption by Evolving Stars”, 2020, ApJ, 889, 1, 45, 11 pp.

**Stephan, A.P.**, Naoz, S., Ghez, A.M., Morris, M.R., Ciurlo, A., Do, T., Breivik, K., Coughlin, S., Rodriguez, C.L., “The Fate of Binaries in the Galactic Center: The Mundane and the Exotic”, 2019, ApJ, 878, 1, 58, 7 pp.

Salas, J.M., Naoz, S., Morris, M.R., **Stephan, A.P.**, “Unseen companions of V Hya inferred from periodic ejections”, 2019, MNRAS, 487, 3, 3029–3036

Denham, P., Naoz, S., Hoang, B.M., **Stephan, A.P.**, Farr, W.M., “Hidden Planetary Friends: On the stability of 2-planet systems in the presence of a distant inclined companion”, 2019, MNRAS, 482, 3, 4146–4154

**Stephan, A.P.**, Naoz, S., Gaudi, B.S., “A-type Stars, the Destroyers of Worlds: The lives and deaths of Jupiters in evolving stellar binaries”, 2018, AJ, 156, 3, 128, 12 pp.

**Stephan, A.P.**, Naoz, S., Zuckerman, B., “Throwing Icebergs at White Dwarfs”, 2017, ApJL, 844, 2, L16, 8 pp.

**Stephan, A.P.**, Naoz, S., Ghez, A.M., Witzel, G., Sitarski, B.N., Do, T., Kocsis, B., “Merging Binaries in the Galactic Center: The eccentric Kozai-Lidov mechanism with stellar evolution”, 2016, MNRAS, 460, 3494–3504

Naoz, S., Fragos, T., Geller, A., **Stephan, A.P.**, Rasio, F.R., “Formation of Black Hole Low-Mass X-ray Binaries in Hierarchical Triple Systems”, 2016, ApJL, 822, 2, L24, 7 pp.

SEMINARS AND  
CONFERENCE  
PARTICIPATION

CCAPP Seminar, OSU, Oct. 6 2020 (**talk**)  
“2020 51th Annual DDA Meeting”, Virtual Meeting, Aug. 3-7 2020 (**talk**)  
235th AAS Meeting, Honolulu, HI, Jan. 2020 (**dissertation talk**)  
Exoplanet seminar, University of Chicago, Oct. 28 2019 (**talk**)  
Theory seminar, Northwestern University, Oct. 25 2019 (**talk**)  
Penn State CEHW seminar, Pennsylvania State University, Oct. 21 2019 (**invited talk**)  
Friday seminar, University of Maryland, Sep. 27 2019 (**talk**)  
Exoplanet Lunch seminar, Princeton University, Sep. 23 2019 (**talk**)  
Thursday seminar, Columbia University, Sep. 19 2019 (**talk**)  
Galaxy Lunch seminar, Yale University, Sep. 18 2019 (**talk**)  
Exoplanet seminar, Yale University, Sep. 17 2019 (**talk**)  
Kavli Institute BBL seminar, MIT, Sep. 16 2019 (**talk**)  
ITC seminar, Harvard University, Sep. 13 2019 (**talk**)  
“Extreme Solar Systems IV”, Reykjavik, Iceland, Aug. 19-23 2019 (**poster**)  
“2019 50th Annual DDA Meeting”, University of Colorado, Boulder, Jun. 10-13 2019 (**talk**)  
“Astrobash”, UCLA, Oct. 19 2018 (**talk**)  
“Japanese-German Meeting on Exoplanets and Planet Formation”, Edesheim, Sep. 24-28 2018 (**invited talk**)  
“Triple Evolution and Dynamics TRENDY-2”, Leiden University, Sep. 10-14 2018 (**talk**)  
“OWL Exoplanet Summer Program”, UCSC, Jul. 8-28 2018 (**talk**)  
“Exoplanets Orbiting Hot Stars”, Vanderbilt University, Jun. 20-22 2018 (**invited talk**)  
“Galactic Center Group Workshop 2017”, UCLA, Dec. 11-14 2017 (**talk**)  
“Astrobash”, UCLA, Sep. 13 2017 (**talk**)  
“ExSoCal 2017”, Caltech, Sep. 18-19 2017 (**talk**)  
“Formation and Dynamical Evolution of Exoplanets”, Aspen, Mar. 27-Apr. 1 2017 (**talk**)  
“Astrobash”, UCLA, Oct. 13 2016 (**talk**)  
“Dynamics and Accretion at the Galactic Center”, Aspen, Feb. 7-12 2016 (**poster**)  
“Astrobash”, UCLA, Dec. 11 2015 (**talk**)