

CONTACT INFO	<i>E-Mail:</i> christopher.oconnor@northwestern.edu <i>ORCID:</i> 0000-0003-3987-3776 <i>Website:</i> ceoconnor1996.github.io/chrisoc_astro/#	
EDUCATION	<b>Cornell University</b> , Ithaca, New York Ph.D., Astronomy and Space Sciences <span style="float: right;">May 2024</span> – Dissertation: <i>Physical and Dynamical Processes in Post-Main-Sequence Planetary Systems</i> – Advisor: Prof. Dong Lai M.S., Astronomy and Space Sciences <span style="float: right;">December 2020</span> <b>University of California, Los Angeles</b> , Los Angeles, California B.S., Astrophysics <span style="float: right;">June 2018</span> <i>Cum laude</i> ; Highest Honors in Astrophysics	
RESEARCH INTERESTS	<b>Theoretical Astrophysics:</b> Dynamics, transients, and transformations in planetary and stellar systems. Extrasolar planet formation and evolution; planets around red giants and white dwarfs. Tides, accretion, disruption, and mergers in stellar binaries and planetary systems.	
RESEARCH POSITIONS	<b>CIERA Postdoctoral Fellow, CIERA, Northwestern University</b> <span style="float: right;"><b>Sept. 2024 – pres.</b></span> Research Aide, Cornell Center for Astrophysics and Planetary Science, Cornell University <span style="float: right;">May – July 2024</span> Graduate Research Assistant, Department of Astronomy, Cornell University <span style="float: right;">2019 – 2024</span> Graduate Fellow, Kavli Institute for Theoretical Physics, UC Santa Barbara <span style="float: right;">July – Dec. 2022</span> Undergraduate Research Assistant, UCLA <span style="float: right;">2016 – 2018</span> Galactic Center Group Research Intern, UCLA <span style="float: right;">2016</span>	
SELECTED HONORS & AWARDS	Cranson and Edna B. Shelley Graduate Research Award, Cornell Astronomy <span style="float: right;">2024</span> Raynor L. Duncombe Student Research Prize, AAS Division on Dynamical Astronomy <span style="float: right;">2024</span> KITP Graduate Fellowship, UC Santa Barbara <span style="float: right;">2022</span> Eleanor York Service Award, Cornell Astronomy <span style="float: right;">2022</span> Sadov Graduate Student Fellowship, Cornell University <span style="float: right;">2022</span> New York Space Grant Graduate Fellowship <span style="float: right;">2021, 2023</span> Charles Geoffrey Hilton Award, UCLA Astronomy <span style="float: right;">2018</span>	
JOURNAL PUBLICATIONS	As lead author: [1] <b>C. E. O'Connor</b> , D. Lai, D. Z. Seligman. On the pollution of white dwarfs by exo-Oort cloud comets. 2023, MNRAS, 524, 6181. doi:10.1093/mnras/stad2281 [2] <b>C. E. O'Connor</b> , L. Bildsten, M. Cantiello, D. Lai. Giant Planet Engulfment by Evolved Giant Stars: Light Curves, Asteroseismology, and Survivability. 2023, ApJ, 950, 128. doi:10.3847/1538-4357/acd2d4 [3] <b>C. E. O'Connor</b> , J. Teyssandier, D. Lai. Secular chaos in white-dwarf planetary systems: origins of metal pollution and short-period planetary companions. 2022, MNRAS, 513, 4178–4195. doi:10.1093/mnras/stac1189 [4] <b>C. E. O'Connor</b> , B. Liu, D. Lai. Enhanced Lidov–Kozai migration and the formation of the transiting giant planet WD 1856+534 b. 2021, MNRAS, 501, 507–514. doi:10.1093/mnras/staa3723 [5] <b>C. E. O'Connor</b> , D. Lai. High-eccentricity migration of planetesimals around polluted white dwarfs. 2020, MNRAS, 498, 4005–4020. doi:10.1093/mnras/staa2645 [6] <b>C. E. O'Connor</b> , B. M. S. Hansen. Constraining planetary migration and tidal dissipation with coeval hot Jupiters. 2018, MNRAS, 477, 175–189. doi:10.1093/mnras/sty645 As co-author: [7] S. Xu, et al. (including <b>C. E. O'Connor</b> ). Gemini/GMOS transmission spectroscopy of the grazing planet candidate WD 1856+534 b. 2021, AJ, 162, 296. doi:10.3847/1538-3881/ac2d26	

CONFERENCES & WORKSHOPS	<p>Emerging Researchers in Exoplanet Science IX, Cornell, July 2024. (OC chair)</p> <p>55th Annual DDA Meeting, University of Toronto, May 2024. (contributed talk)</p> <p>Emerging Researchers in Exoplanet Science VIII, Yale, June 2023. (contributed talk; OC member)</p> <p>54th Annual DDA Meeting, Michigan State Univ., May 2023. (contributed talk)</p> <p>White Dwarfs from Physics to Astrophysics, KITP, Nov 2022. (contributed talk)</p> <p>White Dwarfs as Probes of [...], KITP, Oct – Dec 2022.</p> <p>Exoplanets IV; Las Vegas, NV; May 2022. (contributed talk)</p> <p>53rd Annual DDA Meeting, Flatiron Institute, April 2022. (contributed talk)</p> <p>Emerging Researchers in Exoplanet Science VI, virtual meeting, May 2021. (plenary talk)</p> <p>52nd Annual DDA Meeting, virtual meeting, May 2021. (contributed talk)</p> <p>Triple Evolution and Dynamics 3, virtual meeting, March 2021. (contributed talk)</p> <p>AAS Meeting 237, virtual meeting, Jan 2021. (contributed talk)</p> <p>51st Annual DDA Meeting, virtual meeting, Aug 2020. (contributed talk)</p> <p>AAS Meeting 233; Seattle, WA; Jan 2019. (contributed poster)</p> <p>AAS Meeting 229; Grapevine, TX; Jan 2017. (contributed poster)</p>
SEMINARS & COLLOQUIA	<p>(* = invited)</p> <p>* Stars Research Group Meeting, Center for Computational Astrophysics, Flatiron Institute, Nov 2023.</p> <p>* Star and Planet Formation Seminar, University of Michigan, Nov 2023.</p> <p>* Extrasolar Planet Discussion Group, Princeton University, Oct 2023.</p> <p>Astrophysics Coffee Talk, Institute for Advanced Study, Sept 2023.</p> <p>* Center for Exoplanets and Habitable Worlds Seminar, Penn State University, Sept 2023.</p> <p>* Stars and Planets Journal Club, Boston University, April 2023.</p> <p>* Exoplanets and Stars Seminar, Yale University, February 2023.</p> <p>* TAPIR Seminar, California Institute of Technology, December 2022.</p> <p>Center for Integrative Planetary Science Seminar, UC Berkeley, September 2022.</p> <p>Astronomy Seminar, UCLA, August 2022.</p>
OBSERVING PROGRAMS	<p>[1] Probing the Dynamical History and the Mid-IR SED of WD 1856 b. JWST Cycle 3 GO #5204, awarded 4.5 hr (PI: M. A. Limbach)</p> <p>[2] Revealing the Atmospheric Composition of a White Dwarf Planet. JWST Cycle 1 GO #2358, awarded 13 hr (PI: R. J. MacDonald).</p>
OTHER PUBLICATIONS	<p>[3] W. G. Levine, et al. (including <b>C. E. O'Connor</b>). Emerging Researchers in Exoplanetary Science (ERES): Lessons Learned in Conference Organization for Early-Career Researchers. 2024, BAAS, 56(1), id.2024i004. doi:10.3847/25c2cfcb.9580e9c8</p>
SERVICE	<p><b>Reviewer</b> for A&amp;A, ApJ, MNRAS</p> <p><b>Emerging Researchers in Exoplanet Science Symposium</b> (ERES) 2022 – pres.</p> <ul style="list-style-type: none"> <li>• OC Chair for ERES IX at Cornell, July 2024</li> <li>• OC Member for ERES VIII at Yale, June 2023</li> </ul> <p><b>Graduate and Professional Student Assembly</b>, Cornell University 2020 – 2022</p> <ul style="list-style-type: none"> <li>• Voting Member for Division of Physical Sciences (2 terms)</li> <li>• Field Representative for Astronomy and Space Sciences (2 terms)</li> </ul>