

Aidan Gardner-O'Kearny

📍 Knoxville, Tennessee ✉ aidan.gardnerokearny@cern.ch ☎ 503-333-6975 🔗 aidangardnokearny.github.io
in aidangardnerokearny 🐙 agardner 🐙 aidangardnerokearny

Education

PhD	Univeristy Of Tennessee, Knoxville, Physics	Sept 2025 - Present
MS	Univeristy Of Tennessee, Knoxville, Physics	Sept 2025 - Present
BS	University of Oregon, Physics - Clark Honors College	Sept 2021 – Jun 2025
<ul style="list-style-type: none">• Honors Thesis: Combinatorial fake discriminatory selections for combined dE/dx and disappearing track search with the ATLAS detector		

Research Experience

Jeanty Group - Undergraduate Research Assistant	Eugene, OR
<ul style="list-style-type: none">• Worked with Dr. Laura Jeanty as a part of the ATLAS Collaboration• Part of upcoming dE/dx and disappearing track signature analysis for long-lived, massive, charged particles	Jun 2023 – Jun 2025
Brookhaven National Lab - SULI Intern	Upton, NY
<ul style="list-style-type: none">• Worked with Dr. Abraham Tishelman-Charny as a part of the ATLAS Collaboration• Member of upcoming $SH \rightarrow b\bar{b}\gamma\gamma$ analysis searching for beyond Standard Model scalar bosons	Jun 2024 – Aug 2024

Teaching Experience

UO Tutoring and Academic Engagement Center - Class Encore Mentor	Eugene, OR
<ul style="list-style-type: none">• Leadership role within the Class Encore program	Jun 2024 - Jun 2025
UO Tutoring and Academic Engagement Center - Class Encore Leader	Eugene, OR
<ul style="list-style-type: none">• Support students in introductory courses in order to increase confidence in lecture material	Sept 2022 - Jun 2025
Oregon Pathways to Industry Research Careers - OPIRC Tutor	Eugene, OR
<ul style="list-style-type: none">• Multivariable calculus tutor	Apr 2025 - Jun 2025
UO Physics Department - Introductory Physics Learning Assistant	Eugene, OR
<ul style="list-style-type: none">• Member of the general physics educational team	Apr 2024 - Jun 2024

Presentations

Combinatorial fake discriminatory selections for combined dE/dx and disappearing track search	May 2025
<ul style="list-style-type: none">• UO Undergraduate Research Symposium• Oral presentation• Poster presentation• Aidan Gardner-O'Kearny	
dE/dx and disappearing track background discrimination studies	April 2025
<ul style="list-style-type: none">• UO Clark Honors College Three Minute Thesis• Oral presentation• Aidan Gardner-O'Kearny	

Background ionization behavior for combined dE/dx and disappearing track analysis in the ATLAS detector	March 2025
<ul style="list-style-type: none"> • APS Global Summit • Oral Presentation • Aidan Gardner-O’Kearny, Laura Jeanty, Nathan Young 	
Comparing resolved and boosted jet identification algorithms to search for beyond the Standard Model scalar bosons with the ATLAS detector	August 2024
<ul style="list-style-type: none"> • Brookhaven SULI Intern Research Fair • Poster Presentation • Aidan Gardner-O’Kearny, Abraham Tishelman-Charny, Elizabeth Brost 	
Background ionization behavior for combined dE/dx and disappearing track analysis	May 2024
<ul style="list-style-type: none"> • UO Undergraduate Research Symposium • Poster Presentation • Aidan Gardner-O’Kearny, Laura Jeanty, Nathan Young 	

Awards

UO Physics Department Weiser Research Award	June 2025
UO Physics Department Poster Award - 2nd Place	June 2025
<ul style="list-style-type: none"> • Combinatorial fake discriminatory selections for combined dE/dx and disappearing track search 	
UTK Graduate Fellowship	Feb 2025
UO CURE Travel Grant Awardee	Nov 2024
<ul style="list-style-type: none"> • Award given to support undergraduates present their research at a relevant conference 	
UO Summit Scholar	Sept 2021
<ul style="list-style-type: none"> • Academic excellence scholarship 	

Outreach

Eugene Science Center	Nov 2024
<ul style="list-style-type: none"> • Organized an outreach event for elementary school students • Provided undergraduate students opportunity to perform demos 	

Membership

Phi Beta Kappa	June 2025
American Physical Society	Oct 2024 - Present
<ul style="list-style-type: none"> • Student Member 	
Society Of Physics Students	Jun 2023 - Jun 2025
<ul style="list-style-type: none"> • UO Chapter Treasurer 	

Skills

Languages: Python, C++, TeX/Markdown, Mathematica

Technologies: Linux, Windows, ROOT, Matplotlib/MPLHEP, Git, Google And Microsoft Office Suite