

Department of Physics University of California 366 Physics North MC 7300 Berkeley, CA, 94720-7300 November 8th, 2021

Dear Professor Zalatel and the UC Berkeley Search Committee,

Please find enclosed my application for the University of California, Berkeley job position (JPF03085): "Assistant Professor - Fundamental Symmetries (Experiment)". I found this position through the InspireHEP jobs website. I obtained my Ph.D. in Physics from the University of Chicago in 2018 and am currently a postdoctoral scholar employee at the University of California, Santa Cruz working on the ATLAS Experiment. I am thrilled at the prospect of bringing my experience as a member of the ATLAS collaboration, my dedication to probing the fundamental questions of the Standard Model, and my passion for communicating my knowledge to the physics department at UC Berkeley. My career in physics represents a committment to the core values that UC Berkeley shares: diversity, equity, and inclusion. In my diversity statement, I describe my unique background as a Deaf human in an oral world and how that shapes my passion for community outreach. In teaching, I make my classes accessible to students from all backgrounds to inspire the next-generation of scientists. And in research, I work to provide a safe and inclusive environment so that my students, mentees, and colleagues can collaborate and foster new ideas. If appointed, my research program will be focused on searches for new physics with the ATLAS experiment, instrumentation upgrades to support the completion of the HL-LHC physics program, and software development to meet the computing challenges of particle physics over the next decade.

At both UChicago and UC Santa Cruz, I have been active in mentoring undergraduate students and graduate students across all of my research projects in hardware, software, and physics. This includes guiding students through their physics analysis and supporting them through struggles in their work-life balance. One such graduate student that I was proud to mentor, Dr. Jacob Pasner, graduated from UCSC in 2019 with his Ph.D. on a search for boosted Higgs bosons, and he just recently finished his AAAS Fellowship in Washington, DC. I am also active in outreach activities, from giving international plenary talks to students in physics on how to advocate for their own education, and introducing LHC physics to local high schools through the QuarkNet program. And finally, I am an active participant of the Snowmass community effort to study the prospects of future colliders. My goal is to ensure a broad scope of work for myself and my students and continuity beyond the completion of the LHC program.

Over the next decade, I plan to continue my close collaborations with various institutions and labs including UChicago, UCSC, SLAC, BNL, LBNL, and IRIS-HEP to support my research program of searching for new physics Beyond the Standard Model. In particular, I plan to search for light supersymmetric particles that are dark matter candidates, compatible with astrophysical and cosmological measurements. At UC Berkeley, I am excited to work closely with the physics faculty and get to know all of you as scientists and as humans. I would also feel remiss if I did not mention a little bit of excitement of the possibility of frequenting a local cultural mainstay: Berkeley Bowl.

I am happy to provide any additional material upon request. Finally, you will notice that I included a picture and my pronouns on all material (except this letter).

Sincerely,

Giordon Stark (Pronouns: he/him/point)

Enclosed: curriculum vitæ, Statement of Teaching, Statement of Diversity, Statement of Research, List of Publications, four Letters of Reference