

Tugdual S. LeBohec
FACULTY RECORD UPDATE
January 2023

Evaluation category A: Research

- I. Accepted publications since January 1, 2021
Brecken Larsen et al., "Crystallization in Zirconia Film Nano-Layered with Silica", *Nanomaterials* (Basel), 2021 Dec 19;11(12):3444. doi: 10.3390/nano11123444.
- II. Manuscripts submitted but not accepted since January 1, 2021
T.LeBohec, "The virial theorem for non-differentiable dynamical paths", <https://arxiv.org/abs/2209.06856>
- III. Talks given (virtually or in-person) outside the University of Utah since January 1, 2021
"The virial theorem for non-differentiable paths in resolution-scale relativity" as a keynote speaker for the First International Conference for Physics and Mathematics held on October 19th-20th 2022, within the College of Education Pure Science of the University of Anbar, Ramadi, Iraq.
- IV. Grants in force/recommended since January 1, 2021
01/19/2021, NSF, MRI Consortium: Development of Upgraded Stellar Intensity Interferometry Instrumentation for the VERITAS Observatory, Col, with D. Kieda PI.
12/01/2020, NSF, University of Utah Particle Astrophysics Research Group Grant (VERITAS, HAWC, CTA), Col, with D. Kieda PI.
- IV. Proposals submitted but not (yet) recommended for funding since 2021
Our proposal for the study of nanolayered mirror coatings for low thermal noise in LIGO was rejected multiple time and I decided to move out of this program.

Evaluation category B: Teaching and Service

- I. Courses and enrollments taught since January 1, 2021
Spring 2023: PHYS3410 Introduction to foundation of modern optics
Fall 2022: PHYS5110 Introduction to quantum mechanics
Spring 2022: PHYS3410 Introduction to foundation of modern optics
Fall 2021: Fall 2021: Intro to Particle Physics
Spring 2021: PHYS3730, Intro to computational physics
- II. Contributions to our academic programs since January 1, 2021
NONE
- III. Efforts and activities contributing to a climate of inclusivity in the department and the University of Utah since January 1, 2021
I respect everyone in the department as well as outside but it comes to me quite naturally, without any real effort. There are however individuals in the department who are not treating me inclusively. With the department chair as a witness, I have recently explicitly asked them to change their attitude at least in the presence of students and other employees. I am hopping they will start relating to me in the way I

relate to them: with politeness.

During fall 2022 and spring 2023, I am an UPSTEM fellow.

- IV. Students and postdocs supervised since January 1, 2021
Brecken Larsen, Undergraduate Student
Christopher Ausbeck, Undergraduate Student

- V. Number of supervisory committees you *currently* serve on
(Masters and PhD committees are found at <https://student.apps.utah.edu/uofu/stu/GraduateTracking/>)
 - a. Advisory committees:
NONE (?)
 - b. Terminal Masters committees:
NONE
 - c. PhD supervisory committees:
Paul Bailey
Assam Ghazali
Sean Johnson
Joshua Ratajczak

- VI. Departmental service since January 1, 2021
Advanced laboratory class upgrade and move committee chair.
PANDA Network committee with Gail Zasowski as the chair.
Sustainability committee with Orest Symko as the chair.
Curriculum Reform committee (but it turned out I had nothing to do for this in fall 2022)
A few other less involved committees.

- VII. College of Science or university service since January 1, 2021
NONE

- VIII. External service and/or outreach not associated with the department since January 1, 2021
NONE

- IX. Special services to the department not included above since January 1, 2021
NONE

- X. Special recognition since January 1, 2021
NONE