Rebekah Pestes
Theoretical Particle Physicist
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Cheerful, determined, detail-oriented researcher who thrives on problem-solving,
with 11+ years of tutoring experience and 5 published papers, focused on learning
about the complex workings of the universe and sharing that understanding with others.

TEACHING EXPERIENCE

Math/Physics Learning Coach   *03/2022 - Present*
NovaStar Prep Tutoring   Reston, VA

Graduate Teaching Assistant   *08/2016 - 12/2019*
Virginia Tech, Physics Department   Blacksburg, VA
- Tutored undergraduate physics majors/minors in any physics or math class up to 18 hrs/week
- For 1 semester: Taught/graded for 2 labs/week and tutored introductory physics students for 3 hrs/week

Teacher's Assistant   *09/2010 - 07/2015*
WWU, Physics Department   College Place, WA
- Helped students in physics lab for 3 hrs/week
- Graded lab worksheets/reports and homework
- Tutored introductory physics students for 2hrs/week

Math Tutor   *01/2012 - 06/2015*
WWU, Teaching Learning Center College Place, WA

Wastewater Treatment Lab Asst. *01/2012 - 03/2013*
WWU, Engineering Dept.   College Place, WA

RESEARCH EXPERIENCE

Postdoctoral Associate   *05/2021 - Present*
Virginia Tech, Physics Department   Blacksburg, VA
Advised by Dr. Patrick Huber
- Organized weekly journal club meetings
- Mentored graduate student Yulun Li
- Teamed up on research with Dr. Francesco Capozzi

DOE Office of Science Graduate Student Research (SCGSR) Program Participant   *01/2020 - 12/2020*
Brookhaven National Laboratory   Upton, NY
Collaborated with Dr. Peter Denton (and a postdoc)

Graduate Research Assistant   *08/2015 - 05/2021*
Virginia Tech, Physics Department   Blacksburg, VA
Studied neutrino theory with Dr. Patrick Huber
- Collaborated with 3 other professors and a postdoc
- Worked around the limitations of GLoBES to complete desired analyses, incl. adding new physics
- Created custom χ^2 calculator to minimize by hand when there were too many free parameters

Research Assistant   *09/2010 - 07/2015*
WWU, Physics Department   College Place, WA
Studied protein folding with Dr. Roy Campbell

SKILLS

Operating Systems: Windows, Mac, and Linux
Programming:

Mathematica	C/C++	Perl
SQL	Python	, and more

Libraries: GLoBES   nuSQuIDS

Soft: Patience   Resourcefulness   Persistence
Clear and Concise Communication
Adaptability   Carefulness   Organization

EDUCATION

PhD Physics   *08/2015 - 05/2021*
Virginia Polytechnic Institute & State University
   Electives: Intermediate General Relativity, Quantitative Analysis of Physical Data, Quantum Field Theory   3.85 GPA

MITP Summer School   *07/2018 - 08/2018*
Mainz Institute for Theoretical Physics
"Toward the Next Quantum Field Theory of Nature"

BS Biophysics and Mathematics *09/2010 - 08/2015*
Walla Walla University (WWU)
Minor in Music Performance   3.81 GPA

AWARDS

Ladies of Robeson Award   *2022*
Virginia Tech, Physics Department $300.00

Gertrude Scharff-Goldhaber Prize   *2020*
Brookhaven Women in Science $2,500.00

SCGSR Program Award   *2019*
Department of Energy, Office of Science $36,714.07

William E. Hassinger Graduate Fellowship   *2018*
Virginia Tech, Physics Department $1,635.00

Dean's Diversity Assistantship   *2015*
Virginia Tech, Graduate School $32,645.00

PROFESSIONAL MEMBERSHIPS

Sigma Pi Sigma   *2017 - Present*
Ladies of Robeson   *2015 - Present*
  (VT club for women in physics)
American Physical Society   *2013 - Present*