SIMONE ANGELIQUE HYATER-ADAMS

Curriculum Vitae

Email: simone.hyateradams@colorado.edu
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Education

University of Colorado Boulder

ATLAS Institute

Degree: Ph.D. in Technology, Media, and Society

Focus: Physics Education Research **Expected Graduation:** May 2019

Hampton University Degree: BS Physics Graduated: May, 2014

Awards and Honors

APS 4 Corners Section Harry Lustig Award, 2018

National Science Foundation Graduate Research Fellowship, 2016-2019

APS Outstanding Poster Presentation at NSBP Conference, 2015

Virginia Space Grant Consortium Undergraduate Research Scholar, 2013-2014

Research Interests

Physics Education

Critical Race Studies

Informal Education Programming

Identity

STEAM/Performance Art

Grants

NSF Graduate Research Fellowship

\$46,000 for 3 years Spring 2016-19 "Informal Education for Students of Color: Impacts on Racial and Physics Identity"

Advisor: Noah Finkelstein

Grable Foundation Mini-Grant \$2,000 Summer 2018	"Performing Physics Summer Camp" Organization: Pittsburgh Learning Commons Co-Pls: Jacqueline Cameron, Patrick Cooper
CU Boulder Inclusive Excellence Grant \$3,000 Fall 2016-17	"Empowering Physics Students to Promote Inclusive Excellence at CU: Innovation and Iteration of CU-Prime Diversity Workshops" Organization: CU-Prime Co-Pls: Dimitri Dounas-Frazer, Katherine Rainey
Synberc Expanding Potential Seeds CU-Prime Diversity Workshops \$2,065 Spring 2015-16	"CU-Prime Diversity Workshops" Organization: CU-Prime Co-Pls: Dimitri Dounas-Frazer, Daniel Reinholtz
CU Boulder Inclusive Excellence Grant \$7,770 Spring 2015-16	"Incorporating Physics and Performance Art in PISEC Outreach" Organization: PISEC PIs: Noah Finkelstein & Kathleen Hinko Position: Co-Author & Senior Researcher

Research Experience

EDUCATION RESEARCH:

AIP TEAM-UP Task Force	Advisors: Mia Ong & Sharon Fries-Britt	
Fall 2018-Current	 Write Literature Review for Project Report Conduct Focus groups at the 2018 NSBP Conference 	
Identity Research Fall 2014-Current	Advisors: Kathleen Hinko & Noah Finkelstein	
	 Develop a framework for Racialized Physics Identity 	
ATLAS Institute/ CU Physics Education Research Group	 Create a model for Physics Identity for Black physicists 	
Informal Science Fall 2014-2016	Advisors: Kathleen Hinko & Noah Finkelstein	
	 Develop and facilitate informal programming for K-8 	
JILA Physics Frontier Center	students	

 Examine physics identity development of physics students who volunteer in PISEC outreach program 	
PHYSICS RESEARCH:	
Laser Spectroscopy Sept 2012-May 2014	Advisor: Uwe Hommerich
Hampton University Physics Department	 Crystal Growth and synthesis of solid state Holr Investigation of spectroscopic characteristics Evaluation of usefulness in 2000 nanometer lasing
LARSS Internship June 2013-May 2014	Advisor: Margaret Pippin Topic: LEARN Program
NASA Langley-Science Directorate	 Assisted in the coordination and facilitation of L 2013 workshop Mastered the retrieval, formatting, and organizing of atmospheric data Analyzed possible ozone and aerosol instrument for use in the GLOBE program
LARSS Internship Advisor: Russell DeYoung	NASA Langley-Science Directorate June-August 2012 Topic: LIDAR research
NASA Langley-Science Directorate	 Maintained LIDAR lab and equipment Took measurements of oxygen in water Completed a personal research project on the design of a tree windbreak
CREST Program Advisor: Dr. Robert Loughman	Feb 2011-August 2011 Topic: Laser Spectroscopy Research
Hampton University Atmospheric Sciences Department	 Assisted in the editing of an ozone retrieval algorithm Analyzed and compared algorithm with different methods
Diversity Consulting Ex	perience
Prime Directive Consulting Group	2010

NTL Internship 2011 • Assisted interim President	Philadelphia School District	 Project management
	NTL Internship	

Teaching Experience

Performing Physics Summer Camp Lead Instructor & Curriculum Developer	Pittsburgh learning COmmons Summer 2018
SASC Intro Physics Co-Seminar Instructor	University of Colorado Boulder Fall 2015
Teaching Assistantship Physics 1110 (Calculus-Based Intro Physics)	University of Colorado Boulder Spring 2015

Outreach Experience

Performing Physics Summer Camp Creator & Lead Instructor	Pittsburgh Learning Commons Summer 2018
SMART Summer Program Lead Graduate Mentor	Colorado Diversity Initiative Summer 2015-2017
PISEC Program Graduate Student Director	CU Boulder JILA Physics Frontier Center Fall 2014-2016
Physics Department Tutoring Tutor for Intro Physics	Hampton University 2011-2013
Gear UP Program Volunteer Worker	Mariner's Museum Hampton, VA Nov-2010, Feb-2011 State Aquarium Virginia Beach, VA Nov-2011
Girls Inc Physics Day Demo Team Member	Hampton Convention Center Hampton, VA Nov-2012, Dec-2013

Professional Organizations

American Physical Society
 Position: Member

 American Association of Physics Teachers

Position: Committee on Diversity Member

o NTL

Position: Student Member

National Society of Black Physicists
 Position: Member

Access Network

Position: Access Site Student Organizer/Assembly Fellow

Non-Profit & Volunteer Work

Cultivating Ensembles in STEM Education and Research Conference
Conference Organizer

Conference Organizer 2018-2019

A conference that brings together people with different sensibilities and interests in STEM to celebrate the interwoven nature of sciences, technologies, humanities, and arts as human activities.

Pittsburgh Learning CommonsBoard Member

Board Member 2017-Current

An educational non-profit focused on collaborating with the greater Pittsburgh community to create youth programming

American Association of Physics Teachers Committee on Diversity in Physics Committee Member 2016-Current The committee seeks more effective means of recruitment and retention of minority members of society in physics classes and physics related careers.

Graduate Student Organizations

 United Government of Graduate Students ATLAS Representative

s o **CU Cafe** Chair

ATLAS Student Group
 Graduate Student Government
 Representative

CU Prime
 Diversity Workshop
 Co-Facilitator

Publications:

JOURNAL & CONFERENCE PAPERS:

 S. Hyater-Adams, N. Finkelstein, K. Hinko. "Performing Physics: An Analysis of Design-Based Informal STEAM Education Programs". Physics Education Research Conference Proceedings 2018. Accepted.

- 2. **S. Hyater-Adams**, C. Fracchiolla, N. Finkelstein, K. Hinko (2018). "Critical Look at Physics Identity: An Operationalized Framework for Examining Race and Physics Identity". Physical Review: Physics Education Research. **14**, 010132.
- 3. **S. Hyater-Adams**, Tamia Williams, C. Fracchiolla, N. Finkelstein, K. Hinko. "Intersectionality and Physics Identity: A Case Study of Black Women From Different Nationalities". Physics Education Research Conference Proceedings 2017.
- 4. D.R. Dounas-Frazer, **S. Hyater-Adams**, D. Reinholtz. "Learning to do diversity work: A model for continued education of program organizers". The Physics Teacher 55, 342 (2017).
- 5. C. Fracchiolla, **S. Hyater-Adams**, N. Finkelstein, K. Hinko. "University physics students' motivations and experiences in informal physics programs". Physics Education Research Conference Proceedings 2016.
- 6. **S. Hyater-Adams**, C. Fracchiolla, N. Finkelstein, K. Hinko. "Understanding connections between physics and racial Identities through recognition and relational resources". Physics Education Research Conference Proceedings 2016.
- 7. **S. Hyater-Adams**, K. Hinko, N. Finkelstein. "Pathways to STEM: Understanding Identity of Adult Physicists through Narrative Analysis". Physics Education Research Conference Proceedings 2015.
- 8. **S. Hyater-Adams**, R. DeYoung. "Use of Windbreaks for Hurricane Protection of Critical Facilities." NASA/TM-2012-217788.

OP-ED PIECES:

"An Intern's Story: Make Your Net-Work!". **S. Hyater-Adams**. http://www.nasa.gov/larc/an-intern-s-story-make-your-net-work/#.UqgPIKURZuZ

"Graduate Student Snapshot: Simone Hyater-Adams". A. Grennell. Science Buffs Blog. http://www.sciencebuffs.org/2015/04/graduate-student-snapshot-simone-hyater.html

"Racial Identity and Physics" Filling Space Blog. N. Borroz & **S. Hyater-Adams.** https://filling-space.com/2019/01/11/racial-identity-and-physics/

Presentations

INVITED TALKS:

"Can Performance Support Black Physics Identity?: An investigation of the connections between identity, race, physics, and performance art" **S. Hyater-Adams.** Physics Education Research Seminar. Michigan State University, October 3rd, 2018.

"Identity Studies: Intersections of Physics and Performance for Physicists of Color" **S. Hyater-Adams, T. Williams**Cultivating Ensembles in STEM Education and Research, 2017

"CU Prime Diversity Workshop Model: Training Teachers and Student Leaders around Issues of Equity"

S. Hyater-Adams, D.R. Dounas-Frazer, D. Reinholz

American Association of Physics Teachers Summer Meeting, 2017

"Understanding the Relationship Between Racial and Physics Identity for Black Students"

S. Hyater-Adams, K. Hinko, N. Finkelstein

American Association of Physics Teachers Summer Meeting, 2016

"CU-Prime Diversity Workshops: Creating Spaces for Growth Amongst Organizers" **S. Hyater-Adams**

American Physical Society April Meeting, 2016

"Utilizing Informal Science Programs to Understand and Promote the Connections between Physics identity and Racial Identity."

S. Hyater-Adams, K. Hinko, N. Finkelstein

American Association of Physics Teachers Summer Meeting, 2015

"Physics Road Map: My Research Adventure"

S. Hyater-Adams

CU-Prime Seminar Series, SP 2015

"Carpooling for STEM Education: CU Prime"

S. Hyater-Adams, B. Pollard

University of Colorado Boulder Diversity Summit, 2014

PANELS & ORGANIZED SESSIONS:

- **S. Hyater-Adams** (Panelist). "Results from the First Safe Space for People of Color Meeting in PERC". AAPT Winter Meeting, 2019.
- **S. Hyater-Adams** (Panelist). "Diversity and Inclusion". CommSciConn Rocky Mountain West, 2018.
- **S. Hyater-Adams**, M.B. Bennett, B. Fiedler, K. Hinko, C. Fracchiolla. "Wonderful Ideas Deserve Wonderful Research: Techniques for Studying Informal Physics Programs" Physics Education Research Conference, 2018.
- **S. Hyater-Adams** (Panelist). "Promoting Inclusion via Student Activism". Conference on Undergraduate Women in Physics, 2018.
- **S. Hyater-Adams** (Panelist). United Government of Graduate Students. "Learning to Listen: Graduate Student Leaders on Graduate Student Climate Change Panel". University of Colorado Boulder Diversity Summit, 2015.

- **S. Hyater-Adams** (Panelist). Graduate Students of Color Collective. "Beyond Ferguson Panel". University of Colorado Boulder Diversity Summit, 2014.
- **S. Hyater-Adams** (Session Organizer) "Coping mechanisms for physics students from underrepresented groups" American Association of Physics Teachers Summer Meeting 2017.

POSTERS:

- **S. Hyater-Adams**, N. Finkelstein, K. Hinko. "Performing Physics: An Analysis of Design-Based Informal STEAM Education Programs." Physics Education Research Conference, 2018.
- **S. Hyater-Adams**, C. Fracchiolla, N. Finkelstein, K. Hinko. "Intersectionality and Physics Identity: A Case Study of Black Women From Different Nationalities." Physics Education Research Conference, 2017.
- **S. Hyater-Adams**, C. Fracchiolla, N. Finkelstein, K. Hinko. "Understanding Connections Between Physics and Racial Identities Through Recognition and Relational Resources." Physics Education Research Conference, 2016.
- **S. Hyater-Adams**, K. Hinko, N. Finkelstein. "Utilizing Informal Science Programs to Understand and Promote the Connections between Physics identity and Racial Identity." National Society of Black Physicists Conference, 2015.
- **S. Hyater-Adams**, R. DeYoung. Use of Windbreaks for Hurricane Protection of Critical Facilities. Langley Aerospace Research Student Scholars Poster Session, 2012.
- **S. Hyater-Adams**, M. Pippin. Long-term Engagement in Authentic Research with NASA (LEARN). Langley Aerospace Research Student Scholars Poster Session, 2013. Conference for Undergraduate Women in Physics, 2014.
- **S. Hyater-Adams**, U. Hommerich, E. Brown. Spectroscopic studies of Ho^{3+} doped KPb_2Cl_5 and KPb_2Br_5 for applications in resonantly pumped 2 μ m lasers, External Advisory Board Meeting NSF-CREST at Hampton University, 2013.

Pippin, M., R. Kollmeyer, J. Joseph, M. Yang, A. Omar, T. Coleman, J. Taylor, P. Lewis, A. Weisman, **S. Hyater-Adams**, Long-term Engagement in Authentic Research with NASA (LEARN): Lessons Learned from an Innovative Model for Teacher Research Experiences. American Geophysical Union, Fall Meeting 2013, abstract #1819156

Conferences Attended

American Association of Physics Teachers Winter Meeting

January, 2019

American Physical Society Four Corners Section Meeting	September, 2018
Physics Education Research Conference	July, 2018
American Association of Physics Teachers Summer Meeting	July, 2018
Cultivating Ensembles in STEM Education and Research	September, 2017
National Society of Black Physicists Conference	November, 2017
Physics Education Research Conference	July, 2017
American Association of Physics Teachers Summer Meeting	July, 2017
APS National Mentoring Community Meeting	October, 2016
Physics Education Research Conference	July, 2016
American Association of Physics Teachers Summer Meeting	July, 2016
APS April Meeting	April, 2016
Expanding Potential 2016 Workshop	January, 2016
Physics Education Research Conference	July, 2015
American Association of Physics Teachers Summer Meeting	July, 2015
National Society of Black Physicists Conference	February, 2015
Conference for Undergraduate Women in Physics (CUWiP)	January, 2014
Hampton University School of Science Research Symposium	April, 2011-2013
Virginia Space Grant Consortium Annual Research Conference	April, 2011-2013
NASA STS-135 Pre Launch Education Un-Conference	July, 2011

Diversity Workshops Facilitated

2018 Access Network Assembly	"Working Towards Anti-Oppressive Organizations" S. Hyater-Adams , J. Corbo, G. Quan
2018 Access Network Assembly	"How to Run a Diversity Workshop"

	S. Hyater-Adams , D. Kamau, V. Hernandez-Cruz
2018 CU-Prime Workshop	"Disrupting Sexism in Physics" S. Hyater-Adams , D.R. Dounas-Frazer, K. Rainey
2017 CU-Prime Workshop	"Introduction to White Savior Narrative and Radical Honesty" S. Hyater-Adams , D.R. Dounas-Frazer, K. Rainey
2016 APS National Mentoring Community Meeting	"From Surviving to Thriving in Academia" S. Hyater-Adams & W. Mommandi
2016 Summer Multicultural Access to Research Training (SMART) Program	"From Surviving to Thriving in Academia" S. Hyater-Adams & W. Mommandi
2016 Synberc Expanding Potential Workshop	"CU Prime Diversity Workshops: Creating Spaces for Growth Amongst Organizers" S. Hyater-Adams
2016 CU-Prime Workshop	"What We've Learned So Far" S. Hyater-Adams & D.R. Dounas-Frazer,
2015 CU-Prime Workshop	"Deconstructing Diversity" S. Hyater-Adams & D.R. Dounas-Frazer
2015 CU-Prime Workshop	"Social Change and Allyship" S. Hyater-Adams & D.R. Dounas-Frazer
2015 CU-Prime Workshop	"Moving Beyond the Deficit Model" S. Hyater-Adams , D.R. Dounas-Frazer, D. Reinholz
2015 CU-Prime Workshop	"First-Generation College Students" S. Hyater-Adams , D.R. Dounas-Frazer, D. Reinholz