

Farid Salazar Wong

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INTERESTS

- High energy Quantum Chromodynamics: CGC framework, anisotropies in heavy-ion collisions and small systems, evolution at small-x.

EDUCATION

The State University of New York at Stony Brook, NY, USA Aug 2016- Present
PhD. in **Physics**

GPA: 3.95/4.00

Florida International University, FL, USA Aug 2011- May 2016
Bachelor of Science in **Physics**

Bachelor of Science in **Mathematics**

GPA: 4.00/4.00

RESEARCH EXPERIENCE

Brookhaven National Laboratory, Nuclear Theory Group Aug 2018- Present

Subject : High Energy QCD

Advisor: Bjoern Schenke

Study high energy processes in QCD scattering using the Color Glass Condensate framework. In particular, study the effect of the initial geometry of color charge distribution on diffractive dijet and inclusive dijet production in DIS anisotropies.

Rutgers University, Mathematics Department Summer 2015

Subject : Combinatorial K-theory of Grassmanians.

Advisor: Anders Buch.

Implemented algorithm for computation of composition of Stable Grothendieck polynomials (SGP). Proved formulas for some composition of SGP. Found connection to antipode map of Hopf Algebra of completion ring of SGP.

Florida International University, Physics Department Spring 2015

Subject: Plasma Physics.

Advisor: Werner Boeglin.

Performed numerical simulations of charged particle in several configurations of toroidal and poloidal magnetic fields: mirror machine, torus, etc. Analyzed trajectories in coordinate and phase space.

Florida International University, Physics Department Spring and Fall 2013

Subject: Modern Physics.

Advisor: Rajamani Narayanan.

Co-authored a set of notes addressing topics in Modern Physics from an Undergraduate view point (~ 200 pages).

Implemented several numerical codes for calculation of eigenvalues of solid-state systems and gas of fermions and bosons systems.

**TEACHING
EXPERIENCE**

Women in Science and Engineering (WiSE) Position: Instructor. Designed curriculum and taught 11th grade high school students to learn about modern physics. Sessions consisted of lectures and activities on particle, nuclear and quantum physics.	Fall 2018-Present
The State University of New York at Stony Brook Position: Teaching Assistant. Taught undergraduate Physics labs for Life Science Majors (~ 60 students) Graded papers for Graduate Electrodynamics and held recitation sessions (~ 40 students) Supervised other teaching assistants during the Summer term 2018.	Fall 2016-Summer 2018
Florida International University Position: Undergraduate Teaching Assistant. Led study group sessions and graded papers for several lower and upper division physics and mathematics courses: Physics I, Modern Physics I-II, Calculus I-III, ODE's and Linear Algebra. (~ 15hr/week)	Spring 2012-Present

**CONFERENCES
& TALKS**

Nuclear Physics II Seminar (non-perturbative aspects) Talk: Early-time quark production in heavy-ion collisions.	December 2018
National Nuclear Physics Summer School at Yale Poster presentation: Understanding High Energy QCD using the Color Glass Condensate	June 2018 (2 weeks)
Grad Lab Presentation at SUNY Poster presentation: Gaussian model for decoherence of transverse magnetization due to magnetic field inhomogeneities	April 2018
Grad Seminar Presentation at SUNY Talk: High Chern numbers in photonic crystals.	March 2017
Grad Seminar Presentation at SUNY Talk: The strongly coupled quark gluon plasma.	September 2016
Ronald E. McNair Post Baccalaureate Achievement Programs 12th Annual Symposium Poster presentation: Results on Composition of Stable Grothendieck Polynomials.	September 2015
DIMACS (Rutgers) Undergraduate Summer Research Presentation Talk: Combinatorial K-Theory of T-stable subvarieties.	July 2015
SESAPS 81st Annual Meeting Poster presentation: An Undergraduate View of a Second Year Course in Physics.	November 2014

SKILLS**Language**

- English and Spanish.

Computer

- MATLAB, Maple, C++ ,Python, Java, Microsoft Office, Latex.

HONORS & AWARDS

Graduate Council Fellowship	Fall 2016
S-STEM NSF Scholar	Fall 2015
McNair Fellow	Spring 2015
Fred Hoover Scholar	Spring 2013
Sarah and Salomon Rosenberg Scholar	Fall 2012

REFERENCES

Physics

- Bjoern Schenke
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- Derek Teaney
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Mathematics

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