

Olexiy Dvornikov

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EDUCATION

SAN DIEGO STATE UNIVERSITY

M.S. PHYSICS

2015 - 2017 | GPA: 3.88/4.0

SAN FRANCISCO STATE UNIVERSITY

2014 - 2015

UC SAN DIEGO

B.S. ASTROPHYSICS

2010 - 2014 | GPA: 3.64/4.0

Provost Honors (8 Quarters)

HIGH SCHOOL

FOLSOM HIGH SCHOOL

2006 - 2010 | GPA: 4.5/4.0

President of INTERACT (Rotary)

National Honors Society Member

COURSEWORK

GRADUATE

Astronomical Techniques

Galactic Structure

Relativity

Classical Mechanics

Quantum Mechanics

Electromagnetic Theory

Statistical Mechanics

Theoretical/Mathematical Physics

UNDERGRADUATE

Complex Analysis

Mathematical & Computational Physics

String Theory

Stellar Astrophysics

Observational Astrophysics

Particle Physics

Black Holes

Cosmology

SKILLS

PROGRAMMING

C | ROOT | Python | Mathematica | \LaTeX

LANGUAGES

German | French | Russian

RESEARCH

COSMOLOGY ADVISOR | CHAD KISHIMOTO

Dec 2015 - Present | San Diego State University

Modeled neutrinos in the early universe.

Studied sterile neutrinos produced via lepton asymmetry.

Will submit for a Masters Thesis.

LATTICE THEORY ADVISOR | JEFF GREENSITE

Nov 2014 - Jan 2015 | San Francisco State University

Performed Monte Carlo computations on a lattice.

Worked on comparing the scaling of a pure SU(3) Coulomb potential with asymptotic freedom.

HIGH ENERGY PHYSICS ADVISOR | AVI YAGIL

July 2013 - Jan 2014 | UC San Diego

Looked at Monte Carlo simulations of top quark decays.

Checked if the collimation of the outgoing particles shrunk below experimental resolution.

TEACHING

SAN DIEGO STATE UNIVERSITY | LEAD TEACHING ASSISTANT

August 2015 - Present | Supervisor: Murray Finegold

Taught 9 labs of PHYS182A/195L: Mechanics

Set up lab equipment and trained other teaching assistants

SAN FRANCISCO STATE UNIVERSITY | TEACHING ASSISTANT

August 2014 - May 2015 | Supervisor: Ron Marzke

Taught 4 labs of PHYS122: E & M, Optics, Atoms