Curriculum Vitae
Anastasiya Salova
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Education

UC Davis, Davis, CA — September 2015 to May 2021 (expected)
Ph.D. candidate in Physics
GPA 3.80 out of 4.0

Yale University, New Haven, CT — September 2011 to May 2015
BS in Mathematics and Physics

Teaching Experience

Teaching Assistant for **General Physics** — September 2015 to December 2016
(UC Davis Phys 7A, 7B, 7C)
Responsibilities included teaching the discussion and lab session, grading, attending weekly TA meetings, holding weekly office hours and a final review session.

Teaching Assistant for **Network Theory** — Spring Quarter 2018
(UC Davis ECS/MAE 253)
Responsibilities included holding office hours for students of different academic backgrounds, grading homeworks and exams, assisting with group projects.

Research Experience

Visitor, IPAM Long Program — September-December 2019
Title: Machine Learning in Physics and the Physics of Learning
Institute for Pure and Applied Mathematics at UCLA
- Attended 5 week-long workshops on various topics
- Participated in working groups (coarse-graining in MD, dynamical systems, ML with constraints, model discovery)

Graduate Student Research Assistant — September 2016- present
UC Davis Physics Department
Advisor: Prof. Raissa D'Souza
- Nonlinear dynamics, symmetry breaking states, and control of collective behavior of nanoelectromechanical oscillators (NEMS) and beyond
- Effect of symmetries in dynamical systems on the Koopman operator and its approximations

Graduate Student Research Assistant — Spring Quarter 2016
UC Davis Physics Department
Supervisor: Prof. Emilija Pantic
- Searching for dark matter particles via their collisions with argon nuclei

Undergraduate Thesis Research Project — May 2014 to May 2015
Yale University Physics Department
Thesis Advisor: Prof. Daniel McKinsey
- Gamma Source Position Reconstruction for PIXeY Detector

Perspectives on Science and Engineering
Summer Research — April to July 2012
Yale University Physics Departament
Supervisor: Prof. Jack Sandweiss

Conference Presentations

- APS Far West, Fullerton, CA — October 2018
- Dynamics Days, Evanston, IL — January 2019
- SIAM DS19, Snowbird, UT — May 2019
- NetSci, Burlington, VT — May 2019
- NetSci ISODS satellite meeting, Burlington, VT — May 2019
- Dynamics Days, Hartford, CT — January 2020

Conference Posters	• Dynamics Days, Denver, CO	January 2018
	• Dynamics Days, Evanston, IL	January 2019

Summer Schools

Santa Fe Institute Complexity Summer School June to July 2018

- Attended lectures and participated in discussions on complex behavior in mathematical, physical, living, and social systems
- Participated in interdisciplinary group research projects (e.g., data-driven approaches to cardiac dynamics)

Publications

Published

- Matheny, M. H., Emenheiser, J., Fon, W., Chapman, A., **Salova, A.**, Rohden, M., ... Mesbahi, M. (2019). Exotic states in a simple network of nanoelectromechanical oscillators. Science, 363(6431), eaav7932.
- **Salova, A.**, Emenheiser, J., Rupe, A., Crutchfield, J. P., D'Souza, R. M. (2019). Koopman operator and its approximations for systems with symmetries. Chaos: An Interdisciplinary Journal of Nonlinear Science, 29(9), 093128.

In preparation

- **Salova, A.**, D'Souza, R. M. Decoupled states in networks of amplitude-phase oscillators.
- Emenheiser, J., **Salova, A.**, Snyder, J., Matheny, M. H., Fon, W., Li, J., Roukes, M.L, Crutchfield, J. P., and D'Souza, R. M. Dynamically decoupled synchronization in rings of nanoelectromechanical oscillators.

Refereeing Physical Review E, Nature Communications

Service and Outreach

- Volunteer at 2019 APS Conferences for Undergraduate Women in Physics (CUWiP) at UC Davis
- Member of the UC Davis Physics Diversity and Inclusion group

Public Talks How stable is the solar system, Astronomy on Tap in Davis, 2019