

ANDREJ KOŠMRLJ

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		WEBPAGE	http://www.princeton.edu/~akosmrlj/

POSITIONS

Princeton University

2015– Assistant Professor of Mechanical and Aerospace Engineering
2016– Member of the Princeton Institute for the Science and Technology of Materials
2020– Affiliated with the Graduate Program in Quantitative and Computational Biology
2020– Member of the Princeton Global Collaborative Network ROBELARCH

EDUCATION AND TRAINING

2011–2015 Post-Doctoral Fellow in Physics, Harvard University
Supervisor: David R. Nelson

2006–2011 PhD in Physics, Massachusetts Institute of Technology
Supervisors: Arup K. Chakraborty and Mehran Kardar
Thesis: Statistical physics of T cell receptor selection and function
GPA 5.0 (on 1-5 scale)

2001–2006 B.Sc. in Mathematical Physics, University of Ljubljana, Slovenia
Supervisor: Primož Ziherl
Thesis: Thermodynamic analysis of aggregate phases of soft colloids with a hard core
GPA 10.0 (on 1-10 scale)

RESEARCH INTERESTS

continuum mechanics, soft condensed matter, biophysics, biomechanics, statistical mechanics, morphogenesis, intracellular phase separation, mechanical metamaterials, soft robotics

AWARDS AND HONORS

2020 Princeton Engineering Commendation List for Outstanding Teaching
2019 Princeton Engineering Commendation List for Outstanding Teaching
2019 Alfred Rheinstein Faculty Award (Princeton University)
2019 Soft Matter Emerging Investigator
2018 Princeton Engineering Commendation List for Outstanding Teaching
2018 Excellence in Teaching Award from the School of Engineering and Applied Science
2018 NSF CAREER Award
2017 Princeton Engineering Commendation List for Outstanding Teaching
2016 Princeton Engineering Commendation List for Outstanding Teaching
2015 Princeton Engineering Commendation List for Outstanding Teaching
2010 Finalist for Harvard Society of Fellows (Junior Fellow)
2007 Prešeren award for outstanding undergraduate research, University of Ljubljana
2006 MIT Rosenblith Presidential Fellowship
2001 Silver Medal at International Physics Olympiad
2001 Bronze medal at Mediterranean Regional Mathematics Olympiad
2001 Honorable mention at International Mathematics Tournament of Towns
2001 Bronze medal at Central European Olympiad in Informatics
2000 Honorable mention at International Physics Olympiad
1997–2006 Zoiss Scholarship for talented students, Slovenia

MEMBERSHIP IN PROFESSIONAL SOCIETIES

American Physical Society (APS)
Society of Engineering Science (SES)
Society for Industrial and Applied Mathematics (SIAM)

RESEARCH SUPPORT

Current Support

National Science Foundation DMR-1752100 PI: A. Košmrlj <i>CAREER: Statistical Mechanics of Slender Structures</i>	02/01/2018-01/31/2023 \$563,795 [web link]
National Science Foundation CMMI-2037097 PI: S. Yang, co-PIs: M. Akbarzadeh, P.T.-Brun, A. Košmrlj , D. Salas-de la Cruz <i>FMRG: Threading High-Performance, Self-Morphing Building Blocks Across Scales Toward a Sustainable Futures</i>	12/01/2020-11/30/2025 \$4,600,000 [web link]
National Science Foundation CBET-2134935 PI: C. Nelson, co-PIs: J. Toettcher, A. Košmrlj <i>RECODE: Using light and mechanics to monitor and control the differentiation of lung alveolar organoids</i>	12/01/2021-11/30/2025 \$1,500,000 [web link]
Eric and Wendy Schmidt Transformative Technology Fund PIs: C. Nelson, A. Košmrlj , J. Toettcher <i>Stress Ball Morphogenesis: Combining Mechanics and Optogenetics to Engineer Tissue Folding</i>	08/01/2019-07/31/2022 \$655,672 [web link]
National Science Foundation DMR-2011750 IRG-B investigators: H. Stone, R. Priestley, B. Bassler, C. Brangwynne, S. Datta, M. Haataja, A. Košmrlj , C. Nelson, A. Panagiotopoulos, R. Register <i>MRSEC: Princeton Center for Complex Materials</i> <i>IRG-B: Harnessing Disordered Macromolecular Structures for Living and Soft Matter</i>	09/01/2020-08/31/2026 \$18,000,000 [web link] [web link]

Pending Support

Amazon Research Awards PI: M. Trkov, co-PI: A. Košmrlj <i>Expanding dexterity of soft robotic grippers via origami-inspired design</i>	\$80,000
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Completed Support

National Science Foundation DMR-1420541 PIs: P.T.-Brun, A. Košmrlj <i>MRSEC SEED: Assembling multilayered fibers via liquid-liquid phase separation</i>	09/01/2020-08/31/2021 \$60,000 [web link]
National Science Foundation DMR-1420541 PIs: H. Stone, S. Datta, A. Košmrlj , C. Brangwynne, B. Bassler <i>MRSEC iSuperSeed2: Harnessing the “Rules of Life” to Enable Bio-Inspired Soft Materials</i>	11/01/2018-10/31/2020 \$500,000 [web link]
Princeton SEAS Project X Innovation Research Grant PI: A. Košmrlj <i>Modeling large deformations of growing viscoelastic tissues</i>	02/01/2019-01/31/2020 \$89,710 [web link]
National Science Foundation DMR-1420541 PIs: H. Stone, M. Haataja, A. Košmrlj <i>MRSEC SuperSeed: Hierarchical Engineering of Soft Materials: From Multi-phase Coexistence to Synthetic Nucleosomes</i>	03/01/2017-02/28/2019 \$200,000 [web link]

[Google scholar: total citations = 1753; h-index = 20; i10-index = 23; web link]
 (= indicates shared first-author contributions, * indicates corresponding authors)
 (Superscripts *PD*, *G*, *UG*, *REU*, and *V* denote, respectively, postdocs, graduate students,
 undergraduate students, REU students, and visiting students supervised by me)

in preparation

- S. Tong^G and A. Košmrlj*, *Mechanical response of wrinkled structures*.
- S. Sarkar^G, M. E. H. Bahri^G, and A. Košmrlj*, *Statistical mechanics of nanotubes*.
- M. E. H. Bahri^G, S. Sarkar^G, and A. Košmrlj*, *Statistical mechanics of thermalized sheets under uniaxial tension*.
- S. Sarkar^G, T. Dethe^G, P. Zhilkina^{UG}, and A. Košmrlj*, *Symmetry based classification of phonon bands in periodic elastic media*.
- M. Bogataj, A. Košmrlj*, and M. Brojan*, *Buckling of warped plates*.

submitted

- M. A. Heinrich^G, R. Alert, A. E. Wolf, A. Košmrlj*, and D. J. Cohen*, *Self-assembly of tessellated tissue sheets by growth and collision*, **bioRxiv** 2021.05.06.442983, under review in *Nat. Comm.* [web link]
- S. Tong^G, N. K. Singh^{UG}, R. Sknepnek*, and A. Košmrlj*, *Linear Viscoelastic Properties of the Vertex Model for Epithelial Tissues*, **arXiv:2102.11181**. [web link]
- P. Ronceray*, S. Mao, A. Košmrlj, and M. P. Haataja*, *Liquid demixing in elastic networks: cavitation, permeation, or size selection?*, **arXiv:2102.02787** [web link]
- J. M. Jaslove, K. Goodwin, A. Sundarakrishnan, J. W. Spurlin, S. Mao, A. Košmrlj, and C. M. Nelson*, *Transmural Pressure Signals Through Retinoic Acid to Regulate Lung Development*, under review in *Development*.
- S. Vedel*, A. Košmrlj, H. Nunns, and A. Trusina*, *The “friend and foe” of deterministic and stochastic cell-cell variations*.

2021

36. M. A. Palmer, B. A. Nerger, K. Goodwin, A. Sudhakar^G, S. B. Lemke, P. Ravindran, J. E. Toettcher, A. Košmrlj, and C. M. Nelson*, *Stress ball morphogenesis: how the lizard builds its lung*, **Sci. Adv.**, in press
35. J. Imran Alsous, J. Rozman^V, R. Marmion, A. Košmrlj, and S. Y. Shvartsman*, *Clonal dominance in excitable cell networks*, **Nat. Phys.**, in press
34. S. Sarkar^G, M. Čebren, M. Brojan*, and A. Košmrlj*, *Method of image charges for describing deformation of bounded two-dimensional solids with circular inclusions*, **Phys. Rev. E** **103**, 053004 (2021). [web link] [Selected as Editor’s Suggestion]
33. S. Sarkar^G, M. Čebren, M. Brojan*, and A. Košmrlj*, *Elastic multipole method for describing deformation of infinite two-dimensional solids with circular inclusions*, **Phys. Rev. E** **103**, 053003 (2021). [web link] [Selected as Editor’s Suggestion]
32. B. A. Nerger, J. M. Jaslove, H. E. Elashal, S. Mao, A. Košmrlj, A. J. Link, and C. M. Nelson*, *Local accumulation of extracellular matrix regulates global morphogenetic patterning in the developing mammary gland*, **Curr. Biol.** **31**, 1-15 (2021). [web link]
31. A. Morshedifard⁼, M. Ruiz Garcia^V, M. J. Abdolhosseini Qomi*, and A. Košmrlj*, *Buckling of thermalized elastic sheets*, **J. Mech. Phys. Solids.** **149**, 104296 (2021). [web link]

2020

30. S. Mao^{PD=}, M. Chakraverti-Wuerthwein^{UG=}, H. Gaudio^{REU}, and A. Košmrlj*, *Designing the Morphology of Separated Phases in Multicomponent Liquid Mixtures*, **Phys. Rev. Lett.** **125**, 218003 (2020). [web link] [news]
29. M. A. Heinrich^G, J. M. LaChance, T. J. Zajdel, R. Alert, A. Košmrlj, and D. J. Cohen*, *Size-dependent patterns of cell proliferation and migration in freely-expanding epithelia*, **eLife** **9**, e58945 (2020). [web link]
28. A. Singh, A. Košmrlj, and R. Bruinsma*, *Finite Temperature Phase Behavior of Viral Capsids as Oriented Particle Shells*, **Phys. Rev. Lett.** **124**, 158101 (2020). [web link] [Selected as Editor's Suggestion]
27. C. Fei, S. Mao^{PD}, J. Yan, R. Alert, H. A. Stone, B. L. Bassler, N. S. Wingreen*, and A. Košmrlj*, *Nonuniform growth and surface friction determine bacterial biofilm morphology on soft substrates*, **Proc. Natl. Acad. Sci. U.S.A.** **117** (14), 7622-7632 (2020). [web link] [news]

2019

26. K. Goodwin, S. Mao^{PD}, T. Guyomar^V, E. Miller, D. C. Radisky, A. Košmrlj, and C. M. Nelson*, *Smooth muscle differentiation shapes domain branches during mouse lung development*, **Development** **146**, dev181172 (2019). [web link]
25. J. Yan⁼, C. Fei⁼, S. Mao^{PD=}, A. Moreau, N. S. Wingreen, A. Košmrlj, H. A. Stone*, and B. L. Bassler*, *Mechanical Instability and Interfacial Energy Jointly Drive Biofilm Morphogenesis*, **eLife** **8**, e43920 (2019). [web link]
24. S. Mao^{PD}, D. Kuldinow^{REU}, M. P. Haataja*, and A. Košmrlj*, *Phase behavior and morphology of multicomponent liquid mixtures*, **Soft Matter** **15**, 1297-1311 (2019). [web link]

2018

23. M. Snoussi, J. P. Talledo^{REU}, N.-A. Del Rosario, S. Mohammadi, B.-Y. Ha, A. Košmrlj*, and S. Taheri-Araghi*, *Heterogeneous Absorption of Antimicrobial Peptide LL37 in Escherichia coli Cells Enhances Population Survivability*, **eLife** **7**, e38174 (2018). [web link] [news #1] [news #2] [news #3]
22. J. Yan, A. Moreau, S. Khodaparast, A. Perazzo, J. Feng, C. Fei, S. Mao^{PD}, S. Mukherjee, A. Košmrlj, N.S. Wingreen, B.L. Bassler*, and H.A. Stone*, *Bacterial Biofilm Materials Properties Enable Removal and Transfer by Capillary Peeling*, **Adv. Mater.** **30**, 1804153 (2018). [web link] [news]
21. J. Hu, J. D. Obayemi, K. Malatesta, A. Košmrlj, and W. O. Soboyejo*, *Enhanced cellular uptake of LHRH-conjugated PEG-coated magnetite nanoparticles for specific targeting of triple negative breast cancer cells*, **Mater. Sci. Eng. C** **88**, 32-45 (2018). [web link]

2017

20. S. Nagashima, H. D. Ha, D. H. Kim, A. Košmrlj, H. A. Stone*, and M.-W. Moon*, *Spontaneous formation of aligned DNA nanowires by capillarity-induced skin folding*, **Proc. Natl. Acad. Sci. U.S.A.** **114**, 6233-6237 (2017). [web link]
19. M. J. Bowick, A. Košmrlj, D. R. Nelson, and R. Sknepnek, *Non-Hookean statistical mechanics of clamped graphene ribbons*, **Phys. Rev. B** **95**, 104109 (2017). [web link]
18. A. Košmrlj and D. R. Nelson, *Statistical Mechanics of Thin Spherical Shells*, **Phys. Rev. X** **7**, 011002 (2017). [web link]

2016

17. S. Vedel, H. Nunns, A. Košmrlj, S. Semsey, and A. Trusina, *Asymmetric Damage Segregation Constitutes an Emergent Population-Level Stress Response*, **Cell Systems** **3**, 187 (2016). [web link]
16. A. Košmrlj and D. R. Nelson, *Response of thermalized ribbons to pulling and bending*, **Phys. Rev. B** **93**, 125431 (2016). [web link]

2007-2015

15. A. Košmrlj, P. Cordsen, A. Kyrsting, D. E. Otzen, L. B. Oddershede, and M. H. Jensen, *A monomer-trimer model supports intermittent glucagon fibril growth*, **Sci. Rep.** **5**, 9005 (2015). [web link]
14. S. H. Kang, S. Shan, A. Košmrlj, W. L. Noorduin, S. Shian, J. C. Weaver, D. R. Clarke, and K. Bertoldi, *Complex ordered patterns in mechanical instability induced geometrically frustrated triangular cellular structures*, **Phys. Rev. Lett.** **112**, 098701 (2014). [web link] [news]
13. A. Košmrlj and D. R. Nelson, *Thermal excitations of warped membranes*, **Phys. Rev. E** **89**, 022126 (2014). [web link] [Selected as Editor's Suggestion]
12. J. Shim, S. Shan, A. Košmrlj, S. H. Kang, E. R. Chen, J. C. Weaver, and K. Bertoldi, *Harnessing instabilities for design of soft reconfigurable auxetic/chiral materials*, **Soft Matter** **9**, 8198 (2013). [web link]
11. A. Košmrlj and D. R. Nelson, *Mechanical properties of warped membranes*, **Phys. Rev. E** **88**, 012136 (2013). [web link]
10. A. Košmrlj, M. Kardar, and A. K. Chakraborty, *Statistical Physics of T-Cell Development and Pathogen Specificity*, **Annu. Rev. Condens. Matter Phys.** **4**, 339 (2013). [web link]
9. A. Košmrlj, M. Kardar, and A. K. Chakraborty, *The Influence of T Cell Development on Pathogen Specificity and Autoreactivity*, **J. Stat. Phys.** **149**, 203 (2012). [web link]
8. A. Košmrlj⁼, G. J. Pauschenwein⁼, G. Kahl, and P. Zihlerl, *Continuum theory for cluster morphologies of soft colloids*, **J. Phys. Chem. B** **115**, 7206 (2011). [web link]
7. A. Košmrlj, *Thymic selection of T cells as diffusion with intermittent traps*, **J. Stat. Phys.** **142**, 1277 (2011). [web link]
6. A. Košmrlj⁼, E. L. Read⁼, Y. Qi, T. M. Allen, M. Altfeld, S. G. Deeks, F. Pereyra, M. Carrington, B. D. Walker, and A. K. Chakraborty, *Effects of thymic selection of the T-cell repertoire on HLA class I-associated control of HIV infection*, **Nature** **465**, 350 (2010). [web link]
5. A. K. Chakraborty and A. Košmrlj, *Statistical Mechanical Concepts in Immunology*, **Annu. Rev. Phys. Chem.** **61**, 283 (2010). [web link]
4. L. Mirny, M. Slutsky, Z. Wunderlich, A. Tafvizi, J. Leith, and A. Košmrlj, *How a protein searches for its site on DNA: the mechanism of facilitated diffusion*, **J. Phys. A: Math. Theor.** **42**, 434013 (2009). [web link]
3. A. Košmrlj, A. K. Chakraborty, M. Kardar, and E. I. Shakhnovich, *Thymic Selection of T-Cell Receptors as an Extreme Value Problem*, **Phys. Rev. Lett.** **103**, 068103 (2009). [web link]
2. A. Košmrlj, A. K. Jha, E. S. Huseby, M. Kardar, and A. K. Chakraborty, *How the thymus designs antigen-specific and self-tolerant T cell receptor sequences*, **Proc. Natl. Acad. Sci. U.S.A.** **105**, 16671 (2008). [web link]
1. M. A. Glaser, G. M. Grason, R. D. Kamien, A. Košmrlj, C. D. Santangelo, and P. Zihlerl, *Soft spheres make more mesophases*, **EPL** **78**, 46004 (2007). [web link]

Invited Talks at Universities and Institutes

Upcoming

- “*Designing the Morphology of Separated Phases in Multicomponent Liquid Mixtures*”, **Chemical and Biomolecular Engineering Colloquium, University of California-Berkeley**, Berkeley, CA, *December 2021*.
- “*Pattern formation in biological systems via mechanical instabilities and phase separation*”, **Structural Engineering Seminar, University of Illinois at Urbana-Champaign**, Berkeley, CA, *December 2021*.
- “*Mechanical Instabilities in Growing Biological Systems: Wrinkling and Branching*”, **Physics Colloquium, University of Ljubljana**, Ljubljana, Slovenia, *November 2021*.

2021

59. “*Pattern formation in biological systems via mechanical instabilities and phase separation*”, **Physics Colloquium, Carnegie Mellon University and University of Pittsburgh**, Pittsburgh, PA, *November 2021*.
58. “*Designing the Morphology of Separated Phases in Multicomponent Liquid Mixtures*”, **Nonlinearity and Disorder in Complex Systems Seminar, Otto von Guericke University Magdeburg**, *October 2021*.
57. “*Pattern formation in biological systems via mechanical instabilities and phase separation*”, **Mechanical and Aerospace Engineering Seminar, Princeton University**, Princeton, NJ, *September 2021*.
56. “*Pattern formation in biological systems via mechanical instabilities and phase separation*”, **Bio-physics Seminar, Princeton University**, Princeton, NJ, *September 2021*.
55. “*Pattern formation in biological systems via mechanical instabilities and phase separation*”, **Condensed and Living Matter Seminar, University of Pennsylvania**, Philadelphia, PA, *September 2021*.

2020

54. “*Phase separation in multicomponent liquid mixtures*”, **MPIDS Colloquium, The Max Planck Institute for Dynamics and Self-Organization**, Göttingen, Germany, *December 2020*.
53. “*Phase separation in multicomponent liquid mixtures*”, **Biophysics & Development Seminar, Flatiron Institute**, New York, NY, *October 2020*.
52. “*Phase separation in multicomponent liquid mixtures*”, **Physical Mathematics Seminar, Massachusetts Institute of Technology**, Cambridge, MA, *February 2020*.
51. “*Mechanics of wrinkled structures*”, **Biological Physics Seminar, University of California Los Angeles**, Los Angeles, CA, *January 2020*.
50. “*Mechanics of wrinkled structures*”, **Mechanical Engineering Seminar, California Institute of Technology**, Pasadena, CA, *January 2020*.

2019

49. “*Mechanics of wrinkled structures*”, **Mechanics: Modeling, Experimentation, Computation Seminar, Massachusetts Institute of Technology**, Cambridge, MA, *October 2019*.

48. “Phase separation in multicomponent liquid mixtures”, **Soft Matter Physics seminar**, **New York University**, New York City, NY, *October 2019*.
47. “Phase separation in multicomponent liquid mixtures”, **Applied Mathematics Colloquium**, **New Jersey Institute of Technology**, Newark, NJ, *September 2019*.
46. “Mechanics of wrinkled structures”, **Soft Condensed Matter & Physics of Living Systems Seminar**, **Georgia Institute of Technology**, Atlanta, GA, *August 2019*.
45. “Phase separation in multicomponent liquid mixtures”, **Statistical and Bio Seminar**, **Technion - Israel Institute of Technology**, Haifa, Israel, *March 2019*.
44. “Phase separation in multicomponent liquid mixtures”, **Nonlinear Physics Seminar**, **The Hebrew University of Jerusalem**, Jerusalem, Israel, *March 2019*.
43. “Phase separation in multicomponent liquid mixtures”, **Biological and Soft Matter Seminar**, **Tel Aviv University**, Tel Aviv, Israel, *March 2019*.
42. “Phase separation in multicomponent liquid mixtures”, **Clore Seminar on Soft and Biological Physics**, **Weizmann Institute of Science**, Rehovot, Israel, *March 2019*.
41. “Phase separation in multicomponent liquid mixtures”, **Computations in Science Seminar**, **James Frank Institute**, Chicago, IL, *February 2019*.
40. “Phase separation in multicomponent liquid mixtures”, **Biological Physics Seminar**, **University of California Los Angeles**, Los Angeles, CA, *February 2019*.
39. “Phase separation in multicomponent liquid mixtures”, **Statistical and Biological Physics Seminar**, **Ludwig Maximilian University of Munich**, Munich, Germany, *January 2019*.

2018

38. “Mechanical instabilities in growing biological systems: wrinkling and branching”, **Applied Physics Colloquium**, **Harvard University**, Cambridge, MA, *September 2018*.
37. “Phase separation in multicomponent systems”, **Penn Institute for Computational Science Colloquium**, **University of Pennsylvania**, Philadelphia, PA, *September 2018*.
36. “Statistical Mechanics of Microscopically Thin Thermalized Structures”, **Astrophysics and Planetary Science Colloquium**, **Villanova University**, Philadelphia, PA, *September 2018*.
35. “Mechanical instabilities in growing biological systems: wrinkling and branching”, **Physics of Living Systems seminar**, **Massachusetts Institute of Technology**, Cambridge, MA, *June 2018*.

2017

34. “Elasticity, Geometry and Buckling”, **Mechanical Engineering Colloquium**, **City College of New York**, New York, NY, *March 2017*.
33. “Elasticity, Geometry and Buckling”, **Condensed Matter Seminar**, **University of Massachusetts Amherst**, Amherst, MA, *March 2017*.
32. “Aggregation of proteins: growth of glucagon fibrils and bacterial growth”, **Biological Physics Seminar**, **University of California Los Angeles**, Los Angeles, CA, *February 2017*.
31. “Aggregation of proteins: growth of glucagon fibrils and bacterial growth”, **Biophysics Seminar**, **University of Southern California**, Los Angeles, CA, *January 2017*.
30. “Elasticity, Geometry and Buckling”, **IJS Colloquium**, **Institute Jožef Stefan**, Ljubljana, Slovenia, *January 2017*.

2016

29. “Aggregation of proteins: growth of glucagon fibrils and bacterial growth”, **Bioengineering Colloquium**, **Princeton University**, Princeton, NJ, *April 2016*.

28. “*Elasticity, Geometry and Buckling*”, **Civil and Environmental Engineering Seminar, University of California Irvine**, Irvine, CA, *March 2016*.

2008-2015

27. “*Elasticity, Geometry and Buckling*”, **Physical Mathematics Seminar, Massachusetts Institute of Technology**, Cambridge, MA, *May 2015*.
26. “*Statistical Mechanics of Graphene Membranes and Ribbons*”, **Department of Mechanical and Aerospace Engineering, Princeton University**, Princeton, NJ, *March 2015*.
25. “*Statistical Mechanics of Graphene Membranes and Ribbons*”, **Applied Physics Colloquium, Harvard University**, Cambridge, MA, *February 2015*.
24. “*Elasticity, Geometry and Buckling*”, **LASSP and A&EP Seminar, Cornell University**, Ithaca, NY, *February 2015*.
23. “*Elasticity, Geometry and Buckling*”, **Biological Physics Seminar, University of California San Diego**, San Diego, CA, *February 2015*.
22. “*Elasticity, Geometry and Buckling*”, **Biophysics Seminar, Massachusetts Institute of Technology**, Cambridge, MA, *February 2015*.
21. “*Elasticity, Geometry and Buckling*”, **James Franck Institute, University of Chicago**, Chicago, IL, *January 2015*.
20. “*Statistical Mechanics of Graphene Membranes and Ribbons*”, **Condensed Matter Theory Kid’s seminar, Harvard University**, Cambridge, MA, *December 2014*.
19. “*Elasticity, Geometry and Buckling*”, **Department of Physics, Ludwig Maximilian University of Munich**, Munich, Germany, *November 2014*.
18. “*Statistical Mechanics of Ribbons*”, **Laboratory of Atomic and Solid State Physics, Cornell University**, Ithaca, NY, *August 2014*.
17. “*Elasticity, Geometry and Buckling*”, **Department of Physics, Simon Fraser University**, Vancouver, Canada, *March 2014*.
16. “*Elasticity, Geometry and Buckling*”, **Biological Physics Seminar, University of California Los Angeles**, Los Angeles, CA, *February 2014*.
15. “*Elasticity, Geometry and Buckling*”, **Department of Mechanical and Aerospace Engineering and Program in Applied and Computational Mathematics, Princeton University**, Princeton, NJ, *February 2014*.
14. “*Elasticity, Geometry and Buckling*”, **Squishy Physics seminar, Harvard University**, Cambridge, MA, *January 2014*.
13. “*Elasticity, Geometry and Buckling*”, **Theoretical Physics seminar, Institute Jožef Stefan**, Ljubljana, Slovenia, *January 2014*.
12. “*Mechanical Properties of Warped Membranes*”, **Theoretical Physics seminar, Institute Jožef Stefan**, Ljubljana, Slovenia, *June 2013*.
11. “*Mechanism of T cell specificity for pathogens: implications for the influence of host genetics on HIV control*”, **BioComplexity Meetings, Niels Bohr Institute**, Copenhagen, Denmark, *May 2013*.
10. “*Mechanical Properties of Warped Membranes*”, **BioComplexity Meetings, Niels Bohr Institute**, Copenhagen, Denmark, *May 2013*.
9. “*Mechanical Properties of Warped Membranes*”, **Widely Applied Mathematics seminar, Harvard University**, Cambridge, MA, *March 2013*.
8. “*Mechanism of T cell specificity for pathogens: implications for the influence of host genetics on HIV control*”, **Condensed Matter Theory Kid’s seminar, Harvard University**, Cambridge, MA, *October 2011*.

7. “Mechanism of T cell specificity for pathogens: implications for the influence of host genetics on HIV control”, **Center for Studies in Physics and Biology, Rockefeller University**, New York, NY, February 2011.
6. “Indications of host genetics for T cell development and HIV control”, **Physics Colloquium, University of Ljubljana**, Ljubljana, Slovenia, January 2011.
5. “Mechanism of T cell specificity for pathogens: implications for the influence of host genetics on HIV control”, **Widely Applied Mathematics seminar, Harvard University**, Cambridge, MA, December 2010.
4. “Indications of host genetics for T cell development and HIV control”, **Princeton Center for Theoretical Science, Princeton University**, Princeton, NJ, November 2010.
3. “Effects of thymic selection of the T cell repertoire on HLA-class I associated control of HIV infection”, **Theoretical Physics, Jožef Stefan Institute**, Ljubljana, Slovenia, January 2010.
2. “How the thymus designs antigen-specific and self-tolerant T cell receptor sequences?”, **Center for Cell Decision Processes, Massachusetts Institute of Technology**, Cambridge, MA, September 2008.
1. “Model of T cell development in thymus”, **Theoretical Physics seminar, Institute Jožef Stefan**, Ljubljana, Slovenia, January 2008.

Invited Talks at Conferences and Workshops

Upcoming

- “Designing the Morphology of Separated Phases in Multicomponent Liquid Mixtures”, **Phase Behavior in Soft & Living Matter Workshop**, Princeton, NJ, November 2021.

2021

29. “Designing the Morphology of Separated Phases in Multicomponent Liquid Mixtures”, **Virtual APS March Meeting**, March 2021.

2020

28. “Designing the morphology of separated phases in multicomponent liquid mixtures”, **Virtual APS Mid-Atlantic Section Fall Meeting**, December 2020.
27. “Designing morphology of separated phases in multicomponent liquid mixtures”, **Biological Physics and Physical Biology virtual seminars**, August 2020.
26. “Statistical mechanics of microscopically thin thermalized structures”, **Virtual SIAM/CAIMS Annual Meeting**, Toronto, Canada, July 2020.
25. “Mechanical instabilities in growing biological systems: wrinkling and branching”, **APS March Meeting***, Denver, CO, March 2020.
*APS March Meeting was canceled due to the COVID-19 pandemic. Invited talk was given during the virtual APS March Meeting.
24. “Statistical mechanics of microscopically thin thermalized structures”, **Conference “Low - Dimensional Solids in Hard and Soft Condensed Matter: Mechanics, Thermodynamics, and Electrons”**, Aspen Center for Physics, Aspen, CO, February 2020.

2019

23. “Mechanical instabilities in growing biological systems: wrinkling and branching”, **Workshop “Recent Advances in Mechanics and Mathematics of Materials”**, Rome, Italy, November 2019.

22. “Phase separation in multicomponent liquid mixtures”, Meeting “Beyond the Cell Atlas: Theory, Models, and Computation”, Chan Zuckerberg Biohub, San Francisco, CA, October 2019.
21. “Statistical mechanics of microscopically thin thermalized structures”, USACM Workshop “Recent Advances in the Modeling and Simulation of the Mechanics of Nanoscale Materials”, University of Pennsylvania, Philadelphia, PA, August 2019.
20. “Mechanical instabilities in growing biological systems: wrinkling and branching”, Gordon Research Conference on “Soft Condensed Matter Physics”, New London, NH, August 2019.
19. “Mechanical instabilities in growing biological systems: wrinkling and branching”, 4th conference of young Slovenian researchers, Slovenian World Congress, Ljubljana, Slovenia, July 2019.
18. “Phase separation in multicomponent liquid mixtures”, World Congress of Slovenian Physicists, University of Ljubljana, Ljubljana, Slovenia, July 2019.
17. “Phase separation in multicomponent liquid mixtures”, Princeton Institute for Science and Technology of Materials (PRISM) Annual Research Symposium, Princeton, NJ, March 2019.
16. “Phase separation in multicomponent liquid mixtures”, Princeton Center for Theoretical Science Workshop “Transport in Disordered Environments”, Princeton University, Princeton, NJ, January 2019.

2018

15. “Phase separation in multicomponent liquid mixtures”, 120th Statistical Mechanics Conference, Rutgers University, Piscataway Township, NJ, December 2018.
14. “Phase separation in multicomponent liquid mixtures”, Workshop “Multi-scale Materials Under the Nanoscope”, Georgetown University, Washington, DC, December 2018.
13. “Capillarity-induced Folding of Wrinkled Skin”, SIAM Conference on Mathematical Aspects of Materials Science, Portland, OR, July 2018.
12. “Statistical Mechanics of Microscopically Thin Thermalized Structures”, International Workshop “Localization, Interactions and Superconductivity”, Landau Institute for Theoretical Physics, Moscow, Russia, June 2018.
11. “Mechanical instabilities in growing biological systems: wrinkling and branching”, Workshop on “Geometry of Soft Matter”, International Institute of Physics, Natal, Brazil, May 2018.
10. “Mechanical instabilities in growing biological systems: wrinkling and branching”, Workshop on “Modeling Biological Phenomena from Nano to Macro Scales”, The Fields Institute, Toronto, Canada, May 2018.
9. “Branching morphogenesis in developing lungs”, Princeton Center for Theoretical Science Workshop “Regular Patterns in Biology: Causes and Consequences”, Princeton University, Princeton, NJ, April 2018.

2017

8. “Elasticity, Geometry and Buckling”, Applied Math Seminar, Courant Institute of Mathematical Sciences, New York University, New York, NY, April 2017.
7. “Statistical Mechanics of Microscopically Thin Thermalized Structures”, 70th New England Workshop on Complex Fluids, Yale University, New Haven, CT, March 2017.
6. “Statistical mechanics of microscopically thin thermalized shells”, APS March Meeting, New Orleans, LA, March 2017.

2016

5. “Statistical mechanics of thin structures”, 1st symposium of Slovenian researchers from abroad, Ljubljana, Slovenia, December 2016.

4. “Complex pattern formation in solid structures induced by buckling”, **Workshop “Self-assembly from atoms to life” in honor of Bill Gelbart’s 70th birthday, Mesoamerican Centre for Theoretical Physics in Tuxtla Gutierrez, Chiapas, Mexico, October 2016.**
3. “Statistical Mechanics of Ribbons and Thin Spherical Shells”, **KITP Workshop “Geometry, Elasticity, Fluctuations, and Order in 2D Soft Matter”, University of California Santa Barbara, Santa Barbara, CA, February 2016.**
2. “Statistical Mechanics of Thin Spherical Shells”, **5th Northeast Complex Fluids and Soft Matter Workshop, New York University, New York, NY, January 2016.**

2015

1. “Mechanism of T cell specificity for pathogens: implications for the influence of host genetics on HIV control”, **Conference on “Sensing, Information and Decision at the Cellular Level”, The Abdus Salam International Center for Theoretical Physics, Trieste, Italy, July 2015.**

Contributed Talks (Talks were given by the first authors.)

(Superscripts *PD*, *G*, *UG*, *REU*, and *V* denote, respectively, postdocs, graduate students, undergraduate students, REU students, and visiting students supervised by me)

2021

98. A. Sudhakar^G and A. Košmrlj, “Stress ball morphogenesis: how the lizard builds its lung”, **Soft Materials Coffee Hour, Princeton University, Princeton, NJ, October, 2021.**
97. A. Košmrlj and S. Tong^G, “Mechanical response of wrinkled structures”, **25th International Congress of Theoretical and Applied Mechanics, Milano, Italy, August, 2021.**
96. T. Dethe^G and A. Košmrlj, “Symmetry-based classification of phonon bands in periodic elastic media”, **Virtual Summer School on Soft Solids and Complex Fluids, University of Massachusetts Amherst, Amherst, MA, June 2021.**
95. S. Tong^G and A. Košmrlj, “Linear Viscoelastic Properties of the Vertex Model for Epithelial Tissues”, **Soft Materials Coffee Hour, Princeton University, Princeton, NJ, April, 2021.**
94. S. Sarkar^G, M. E. H. Bahri^G, and A. Košmrlj, “Statistical mechanics of nanotubes”, **Virtual APS March Meeting, March, 2021.**
93. M. E. H. Bahri^G, S. Sarkar^G, and A. Košmrlj, “Statistical mechanics of 2D sheets under uniaxial tension”, **Virtual APS March Meeting, March, 2021.**
92. T. Dethe^G, S. Sarkar^G, M. Marinčič^V, P. Zhilkina^{UG}, and A. Košmrlj, “Predicting Degeneracy and Topological Properties in 2D Phononic Band Diagrams”, **Virtual APS March Meeting, March, 2021.**
91. S. Tong^G, N. Singh^{UG}, R. Sknepnek, and A. Košmrlj, “Viscoelastic properties of tissues in the vertex model”, **Virtual APS March Meeting, March, 2021.**
90. A. Sudhakar^G and A. Košmrlj, “Morphing of growing sheets via active contractions of muscle cells”, **Virtual APS March Meeting, March, 2021.**
89. M. Heinrich^G, A. Wolf, D. Cohen, and A. Košmrlj, “Multi-tissue mosaics of homotypic and heterotypic cell monolayers”, **Virtual APS March Meeting, March, 2021.**
88. P. Ronceray, S. Mao, A. Košmrlj, and M. Haataja, “Elastically limited liquid-liquid phase separation”, **Virtual APS March Meeting, March, 2021.**

2020

87. T. Dethe^G and A. Košmrlj, “Effect of Crystal Symmetry-breaking on Wave Propagation through Phononic Crystals”, **Soft Materials Coffee Hour, Princeton University, Princeton, NJ, October, 2020.**

86. A. Košmrlj, S. Mao^{PD}, M. Chakraverti-Wuerthwein^{UG}, and H. Gaudio^{REU}, “*Designing morphology of separated phases in multicomponent mixtures**”, **Virtual Society of Engineering Science (SES) technical meeting**, September, 2020.
* Talk was selected for the live presentation
85. M. Heinrich^G, A. Košmrlj, and D. Cohen, “*Tissue-tissue interactions at the boundaries of colliding expanding cell monolayers**”, **Virtual Society of Engineering Science (SES) technical meeting**, September, 2020.
* Talk was selected for the pre-recorded presentation.
84. T. Dethe^G, S. Sarkar^G, M. Marinčič^V, P. Zhilkina^{UG}, and A. Košmrlj, “*Effect of Crystal Symmetries on Wave Propagation through 2D Phononic Crystals**”, **Virtual Society of Engineering Science (SES) technical meeting**, September, 2020.
* Talk was selected for the pre-recorded presentation.
83. S. Sarkar^G and A. Košmrlj, “*Statistical mechanics of nanotubes**”, **Virtual Society of Engineering Science (SES) technical meeting**, September, 2020.
* Talk was selected for the pre-recorded presentation.
82. M. Bahri^G and A. Košmrlj, “*Influence of Thermal Fluctuations on the Mechanical Properties of 2D Materials Under Uni-Axial Tension**”, **Virtual Society of Engineering Science (SES) technical meeting**, September, 2020.
* Talk was selected for the pre-recorded presentation.
81. S. Tong^G, R. Sknepnek, and A. Košmrlj, “*Viscoelastic properties of tissues in the vertex model**”, **Virtual Society of Engineering Science (SES) technical meeting**, September, 2020.
* Talk was selected for the pre-recorded presentation.
80. A. Sudhakar^G and A. Košmrlj, “*Morphing of growing sheets via active contractions of muscle cells**”, **Virtual Society of Engineering Science (SES) technical meeting**, September, 2020.
* Talk was selected for the pre-recorded presentation.
79. S. Tong^G, R. Sknepnek, and A. Košmrlj, “*Viscoelastic properties of tissues in the vertex model**”, **13th Northeast Complex Fluids and Soft Matter Workshop**, The City College of New York, June, 2020.
78. T. Dethe^G, S. Sarkar^G, and A. Košmrlj, “*Effect of Symmetry Breaking on Phononic Crystal Band Structures**”, **13th Northeast Complex Fluids and Soft Matter Workshop**, The City College of New York, June, 2020.
77. T. Dethe^G and A. Košmrlj, “*How can symmetry properties help understand phononic crystal band structures?**”, **Virtual Summer School on Soft Solids and Complex Fluids**, University of Massachusetts Amherst, June 2020.
76. A. Košmrlj, M. S. Chakraverti-Wuerthwein^{UG}, S. Mao^{PD}, H. Gaudio^{REU}, and M. Haataja, “*Designing morphology of separated phases in multicomponent liquid mixtures**”, **APS March Meeting***, Denver, CO, March, 2020.
*APS March Meeting was canceled due to the COVID-19 pandemic. Talk was given during the virtual APS March Meeting.
75. M. Heinrich^G, J. Strain, A. Košmrlj, and D. Cohen, “*Tissue-Tissue Interactions at Boundaries of Colliding Monolayers**”, **APS March Meeting***, Denver, CO, March, 2020.
*APS March Meeting was canceled due to the COVID-19 pandemic. Talk was given during the virtual APS March Meeting.
74. S. Mao^{PD}, M. Haataja, and A. Košmrlj, “*Size selection of phase-separated liquid droplets in strain-stiffening elastic networks**”, **APS March Meeting***, Denver, CO, March, 2020.
*APS March Meeting was canceled due to the COVID-19 pandemic.
73. S. Tong^G and A. Košmrlj, “*Mechanical response of wrinkled structures**”, **APS March Meeting***, Denver, CO, March, 2020.
*APS March Meeting was canceled due to the COVID-19 pandemic.

72. M. E. H. Bahri^G and A. Košmrlj, “Statistical mechanics of 2D sheets under uniaxial tension”, **APS March Meeting***, Denver, CO, March, 2020.
*APS March Meeting was canceled due to the COVID-19 pandemic.
71. S. Sarkar^G and A. Košmrlj, “Statistical mechanics of nanotubes”, **APS March Meeting***, Denver, CO, March, 2020.
*APS March Meeting was canceled due to the COVID-19 pandemic.
70. T. Dethe^G, S. Sarkar^G, M. Marinčič^V, and A. Košmrlj, “Tuning of 2D Phononic Band Structures via Buckling Instability”, **APS March Meeting***, Denver, CO, March, 2020.
*APS March Meeting was canceled due to the COVID-19 pandemic.

2019

69. S. Sarkar^G and A. Košmrlj, “Mechanical properties of thermalized cylindrical shells”, **Soft Materials Coffee Hour, Princeton University**, Princeton, NJ, November 2019.
68. M. E. H. Bahri^G and A. Košmrlj, “Influence of Thermal Fluctuations on the Mechanical Properties of 2D Anisotropic Materials”, **56th Society of Engineering Science (SES) annual technical meeting**, St. Louis, MO, October 2019.
67. S. Mao^{PD}, D. Kuldinow^{REU}, M. Haataja, and A. Košmrlj, “Phase behavior and morphology of multicomponent mixtures”, **56th Society of Engineering Science (SES) annual technical meeting**, St. Louis, MO, October 2019.
66. S. Tong^G and A. Košmrlj, “Mechanical response of wrinkled structures”, **56th Society of Engineering Science (SES) annual technical meeting**, St. Louis, MO, October 2019.
65. M. Heinrich^G, J. LaChance, T. Zajdel, D. Cohen, and A. Košmrlj, “Growth Dynamics of Large, Freely Expanding Epithelial Monolayers”, **56th Society of Engineering Science (SES) annual technical meeting**, St. Louis, MO, October 2019.
64. C. Fei, S. Mao^{PD}, J. Yan, R. Alert, H. Stone, B. Bassler, N. Wingreen, and A. Košmrlj, “Mechanical principles of biofilm morphodynamics”, **56th Society of Engineering Science (SES) annual technical meeting**, St. Louis, MO, October 2019.
63. A. Košmrlj, K. Goodwin, S. Mao^{PD}, T. Guyomar^V, and C. M. Nelson, “Mechanical model of branching morphogenesis during lung development”, **56th Society of Engineering Science (SES) annual technical meeting**, St. Louis, MO, October 2019.
62. M. Heinrich^G, A. Košmrlj, and D. Cohen, “Growth Dynamics of Large, Freely Expanding Epithelial Monolayers”, **Mechanical and Aerospace Engineering Research Day, Princeton University**, Princeton, NJ, September 2019.
61. M. Heinrich^G, A. Košmrlj, and D. Cohen, “Cell Cycle and Growth Dynamics of Large, Unconstrained Tissues”, **Soft Materials Coffee Hour, Princeton University**, Princeton, NJ, August 2019.
60. A. Košmrlj, “Mechanical instabilities in growing biological systems: wrinkling and branching”, **KITP Workshop “Morphogenesis in Animals and Plants: Search for Principles”**, University of California Santa Barbara, Santa Barbara, CA, July 2019.
59. S. Mao^{PD}, D. Kuldinow^{REU}, M. Haataja, and A. Košmrlj, “Phase behavior and morphology of multicomponent mixtures”, **StatPhys 27**, Buenos Aires, Argentina, July 2019.
58. S. Tong^G and A. Košmrlj, “Mechanical response of wrinkled structures”, **Frontiers in Applied & Computational Mathematics held jointly with the 11th Northeast Complex Fluids and Soft Matter Workshop**, New Jersey Institute of Technology, Newark, NJ, May 2019.
57. M. Heinrich^G, A. Košmrlj, and D. Cohen, “Hurricanes and Watermelons: Expansion dynamics and cell cycle in expanding tissues”, **Princeton Bioengineering Colloquium**, Princeton, NJ, March 2019.
56. S. Mao^{PD}, D. Kuldinow^{REU}, M. Haataja, and A. Košmrlj, “Phase behavior and morphology of multicomponent mixtures”, **APS March Meeting**, Boston, MA, March 2019.

55. A. Morshedifard, M. Ruiz Garcia^V, M. J. Abdolhosseini Qomi, and A. Košmrlj, “*Buckling of thermalized sheets*”, **APS March Meeting**, Boston, MA, *March 2019*.
54. A. Košmrlj and D. R. Nelson, “*Buckling of thermalized cylindrical shells*”, **APS March Meeting**, Boston, MA, *March 2019*.
53. S. Tong^G and A. Košmrlj, “*Mechanical response of wrinkled structures*”, **APS March Meeting**, Boston, MA, *March 2019*.
52. S. Sarkar^G, M. Čebtron, M. Brojan, and A. Košmrlj, “*Elastic multipole method for describing deformation of 2D solid structures with circular holes and inclusions*”, **APS March Meeting**, Boston, MA, *March 2019*.
51. M. Heinrich^G, D. Cohen and A. Košmrlj, “*Growth dynamics of expanding circular tissues*”, **APS March Meeting**, Boston, MA, *March 2019*.
50. M. E. H. Bahri^G and A. Košmrlj, “*Statistical mechanics of anisotropic 2D sheets*”, **APS March Meeting**, Boston, MA, *March 2019*.
49. M. Čebtron, M. Brojan, and A. Košmrlj, “*Mechanics of interconnected balloon networks*”, **APS March Meeting**, Boston, MA, *March 2019*.
48. K. Goodwin, A. Košmrlj, and C. Nelson, “*Patterned smooth muscle constrains and constricts the airway epithelium during branching morphogenesis*”, **APS March Meeting**, Boston, MA, *March 2019*.
47. C. Fei, S. Mao^{PD}, J. Yan, R. Alert, H. A. Stone, B. Bassler, A. Košmrlj, and N. Wingreen, “*Mechanical Principles Underlying Development of Bacterial Biofilm Morphology*”, **APS March Meeting**, Boston, MA, *March 2019*.
46. S. Tong^G and A. Košmrlj, “*Mechanical response of wrinkled structures*”, **Soft Materials Coffee Hour, Princeton University**, Princeton, NJ, *February 2019*.
45. A. Košmrlj, S. Mao^{PD}, D. Kuldinow^{REU}, and M. P. Haataja, “*Morphology of multicomponent liquid mixtures*”, **10th Northeast Complex Fluids and Soft Matter Workshop, Rutgers University**, Piscataway Township, NJ, *January 2019*.
44. S. Mao^{PD}, D. Kuldinow^{REU}, M. P. Haataja, and A. Košmrlj, “*Convex hull procedure for constructing phase diagrams of multicomponent mixtures*”, **10th Northeast Complex Fluids and Soft Matter Workshop, Rutgers University**, Piscataway Township, NJ, *January 2019*.

2018

43. M. E. H. Bahri^G and A. Košmrlj, “*Renormalization of elastic moduli of 2-D crystals*”, **120th Statistical Mechanics Conference, Rutgers University**, Piscataway Township, NJ, *December 2018*.
42. M. E. H. Bahri^G and A. Košmrlj, “*Influence of Thermal Fluctuations on the Elastic Moduli of a 2-D Anisotropic Crystal*”, **Soft Materials Coffee Hour, Princeton University**, Princeton, NJ, *November 2018*.
41. A. Košmrlj, K. Goodwin, S. Mao^{PD}, T. Guyomar^V, and C. M. Nelson, “*Branching morphogenesis in developing lungs*”, **55th Society of Engineering Science (SES) annual technical meeting**, Madrid, Spain, *October 2018*.
40. A. Košmrlj, S. Nagashima, H. D. Ha, D. H. Kim, H. A. Stone, and M.-W. Moon, “*Capillarity-induced folding of wrinkled skin films*”, **Solvay Workshop on “Mechanics of slender structures in physics, biology and engineering: from failure to functionality”**, Brussels, Belgium, *August 2018*.
39. A. Košmrlj, “*Phase separation in systems with many components*”, **Fascination with fluctuations, correlations, and disorder: a celebration of Mehran Kardar’s 60th birthday**, **Massachusetts Institute of Technology**, Cambridge, MA, *June 2018*.
38. A. Košmrlj, S. Nagashima, H. D. Ha, D. H. Kim, H. A. Stone, and M.-W. Moon, “*Capillarity-induced folding of wrinkled skin films*”, **75th New England Complex Fluids Meeting**, **Massachusetts Institute of Technology**, Cambridge, MA, *June 2018*.

37. S. Mao^{PD}, H. Stone, A. Košmrlj, and J. Yan, “Mechanical Instabilities in Growing Bacterial Biofilms”, **18th U.S. National Congress for Theoretical and Applied Mechanics**, Chicago, IL, June 2018.
36. A. Košmrlj and D. Nelson, “Statistical Mechanics of Microscopically Thin Thermalized Structures”, **18th U.S. National Congress for Theoretical and Applied Mechanics**, Chicago, IL, June 2018.
35. J. Yan, S. Mao^{PD}, A. Košmrlj, and H. Stone, “Mechanomorphogenesis of *V. cholerae* Biofilms”, **18th U.S. National Congress for Theoretical and Applied Mechanics**, Chicago, IL, June 2018.
34. S. Mao^{PD}, M. P. Haataja, and A. Košmrlj, “Multi-component phase behavior inspired by membraneless compartmentalization”, **Soft Materials Coffee Hour, Princeton University**, Princeton, NJ, April 2018.
33. M. Heinrich^G, and A. Košmrlj, “Using Physical Models of Epithelial Sheets to Study Collective Behaviors of Cells”, **APS March Meeting**, Los Angeles, CA, March 2018.
32. P. Talledo^{REU}, S. Sarkar^G, S. Taheri-Araghi, and A. Košmrlj, “Modeling Population Dynamics of Antimicrobial Peptides in Bacterial Culture”, **APS March Meeting**, Los Angeles, CA, March 2018.
31. S. Taheri-Araghi, M. Snoussi, P. Talledo^{REU}, B.-Y. Ha, and A. Košmrlj, “Population Dynamics of Antimicrobial Peptides are Driven by Single-cell Heterogeneities and Retention of Peptides in Dead Cells”, **APS March Meeting**, Los Angeles, CA, March 2018.
30. A. Košmrlj, T. Guyomar^V, K. Goodwin, and C. Nelson, “Branching morphogenesis of growing tubes”, **APS March Meeting**, Los Angeles, CA, March 2018.
29. S. Sarkar^G, and A. Košmrlj, “Image Charges in 2D Linear Elasticity”, **APS March Meeting**, Los Angeles, CA, March 2018.
28. S. Tong^G, and A. Košmrlj, “Mechanics of Wrinkled Structures”, **APS March Meeting**, Los Angeles, CA, March 2018.
27. M. E. H. Bahri^G, M. Ruiz Garcia^V, A. Morshedifard, M.J. Abdolhosseini Qomi, and A. Košmrlj, “Buckling of 2-d Thermalized Material Under Bi-Axial Loading”, **APS March Meeting**, Los Angeles, CA, March 2018.
26. S. Mao^{PD}, M. P. Haataja, and A. Košmrlj, “Multi-component phase behavior inspired by membraneless compartmentalization”, **APS March Meeting**, Los Angeles, CA, March 2018.
25. A. Košmrlj, S. Nagashima, H. D. Ha, D. H. Kim, H. A. Stone, and M.-W. Moon, “Capillarity-induced folding of wrinkled skin films”, **8th Northeast Complex Fluids and Soft Matter Workshop, Columbia University**, New York, NJ, January 2018.
24. S. Mao^{PD}, M. P. Haataja, and A. Košmrlj, “Multi-component phase behavior inspired by membraneless compartmentalization”, **8th Northeast Complex Fluids and Soft Matter Workshop, Columbia University**, New York, NJ, January 2018.
23. S. Sarkar^G and A. Košmrlj, “Image charges in 2D linear elasticity”, **8th Northeast Complex Fluids and Soft Matter Workshop, Columbia University**, New York, NJ, January 2018.

2017

22. S. Mao^{PD}, M. P. Haataja, and A. Košmrlj, “Modeling multicomponent phase behavior inspired by membraneless compartmentalization in cells”, **118th Statistical Mechanics Conference, Rutgers University**, Piscataway Township, NJ, December 2017.
21. M. Heinrich^G and A. Košmrlj, “Modeling Epithelia- flocking, coordinated U-turns, sticky/slippery walls, and more”, **Princeton Bioengineering Colloquium**, Princeton, NJ, October 2017.
20. M. Čebtron, S. Sarkar^G, A. Košmrlj, and M. Brojan, “Elastic multipole method for describing deformation of 2D solid structures”, **3rd International Conference on Multiscale Computational Methods for Solids and Fluids**, Ljubljana, Slovenia, September 2017.

19. S. Mao^{PD} and A. Košmrlj, “Particle aggregation during receptor-mediated endocytosis”, **54th Society of Engineering Science (SES) annual technical meeting, Northeastern University, Boston, MA, July 2017.**
18. A. Košmrlj and D.R. Nelson, “Statistical Mechanics of Microscopically Thin Thermalized Structures”, **54th Society of Engineering Science (SES) annual technical meeting, Northeastern University, Boston, MA, July 2017.**
17. M. Heinrich^G and A. Košmrlj, “Motility of epithelial sheets in the presence of sticky or slippery walls”, **7th Northeast Complex Fluids and Soft Matter Workshop, Princeton University, Princeton, NJ, May 2017.**
16. M. Ruiz-Garcia^V and A. Košmrlj, “Buckling of thermalized sheets”, **7th Northeast Complex Fluids and Soft Matter Workshop, Princeton University, Princeton, NJ, May 2017.**
15. M. Ruiz-Garcia^V and A. Košmrlj, “Buckling of thermalized sheets”, **18th Mid-Atlantic Soft Matter Workshop, University of Pennsylvania, Philadelphia, PA, May 2017.**
14. A. Košmrlj and D.R. Nelson, “Statistical Mechanics of Thin Spherical Shells”, **18th Mid-Atlantic Soft Matter Workshop, University of Pennsylvania, Philadelphia, PA, May 2017.**
13. S. Mao^{PD} and A. Košmrlj, “Particle aggregation during receptor-mediated endocytosis”, **APS March Meeting, New Orleans, LA, March 2017.**
12. S. Sarkar^G and A. Košmrlj, “Elastic multipole method for describing deformation of 2D solid structures”, **APS March Meeting, New Orleans, LA, March 2017.**
11. S. Mao^{PD} and A. Košmrlj, “Particle aggregation during receptor-mediated endocytosis”, **6th Northeast Complex Fluids and Soft Matter Workshop, Stevens Institute of Technology, Hoboken, NJ, January 2017.**
10. S. Sarkar^G and A. Košmrlj, “Elastic multipole method for describing deformation of 2D solid structures”, **6th Northeast Complex Fluids and Soft Matter Workshop, Stevens Institute of Technology, Hoboken, NJ, January 2017.**

2016

9. A. Košmrlj, M.J. Bowick, D.R. Nelson, and R. Sknepnek, “Statistical mechanics of ribbons”, **Conference “Active and Smart Matter: A New Frontier for Science and Engineering”, Syracuse University, Syracuse, NY, June 2016.**
8. A. Košmrlj, “Intermittent Growth of Glucagon Fibrils”, **Conference “Physics of Development and Disease”, Aspen Center for Physics, Aspen, CO, April 2016.**
7. A. Košmrlj and D.R. Nelson, “Statistical Mechanics of Thin Spherical Shells”, **APS March Meeting, Baltimore, MD, March 2016.**

2009-2015

6. A. Košmrlj, D.R. Nelson, J. C. Weaver, J. Vlassak, and K. Xiao, “Mechanical Properties of 3D Printed Warped Membranes”, **APS March Meeting, San Antonio, TX, March 2015.**
5. A. Košmrlj, D.R. Nelson, J. C. Weaver, J. Vlassak, and K. Xiao, “Mechanical Properties of Warped Membranes”, **APS March Meeting, Denver, CO, March 2014.**
4. A. Košmrlj and D.R. Nelson, “Elastic free energy of deformations for warped membranes”, **Statistical Mechanics Conference, Rutgers University, Piscataway Township, NJ, December 2011.**
3. A. Košmrlj, M. Kardar and A. K. Chakraborty, “Thymic selection of T cells as a diffusion with intermittent traps”, **Statistical Mechanics Conference, Rutgers University, Piscataway Township, NJ, May 2010.**
2. A. Košmrlj, A. K. Chakraborty, M. Kardar, and E.I. Shakhnovich, “Thymic Selection of T-Cell Receptors as an Extreme Value Problem”, **APS March Meeting, Portland, OR, March 2010.**

1. A. Košmrlj, M. Kardar and A. K. Chakraborty, “*Thymic Selection of T-Cell Receptors as an Extreme Value Problem*”, **Statistical Mechanics Conference, Rutgers University, Piscataway Township, NJ, May 2009.**

Poster Presentations (Posters were presented by the first authors.)

(Superscripts *PD*, *G*, *UG*, *REU*, and *V* denote, respectively, postdocs, graduate students, undergraduate students, REU students, and visiting students supervised by me)

2020

30. M. Heinrich^G, J. Strain, S. Gonzalez, A. Košmrlj, and D. Cohen, “*Tissue-tissue interactions at boundaries of colliding growing monolayers of varying size, shape, and cell density*”, **Princeton Center for Theoretical Science Workshop “The Physics of Collective Cell Migration”, Princeton University, Princeton, NJ, January 2020.**
29. O. Canton, D. Cohen, A. Košmrlj, and R. Alert, “*Modeling vortex formation in spreading epithelial monolayers*”, **Princeton Center for Theoretical Science Workshop “The Physics of Collective Cell Migration”, Princeton University, Princeton, NJ, January 2020.**

2019

28. S. Sarkar^G and A. Košmrlj, “*Buckling of thermalized cylindrical shells*”, **56th Society of Engineering Science (SES) annual technical meeting, St. Louis, MO, October 2019.**
27. M. E. H. Bahri^G and A. Košmrlj, “*Influence of thermal fluctuations on the elastic moduli of 2-D anisotropic crystals*”, **USACM Workshop “Recent Advances in the Modeling and Simulation of the Mechanics of Nanoscale Materials”, University of Pennsylvania, Philadelphia, PA, August 2019.**
26. S. Sarkar^G and A. Košmrlj, “*Mechanical properties of thermalized cylindrical shells*”, **USACM Workshop “Recent Advances in the Modeling and Simulation of the Mechanics of Nanoscale Materials”, University of Pennsylvania, Philadelphia, PA, August 2019.**
25. S. Mao^{PD}, D. Kuldinow^{REU}, M. Haataja, and A. Košmrlj, “*Phase separation in multicomponent liquid mixtures*”, **Gordon Research Conference on “Soft Condensed Matter Physics”, New London, NH, August 2019.**
24. S. Mao^{PD}, C. Fei, J. Yan, R. Alert, H. A. Stone, B. L. Bassler, N. S. Wingreen, and A. Košmrlj, “*Mechanical Principles of Biofilm Morphodynamics*”, **Frontiers in Applied & Computational Mathematics held jointly with the 11th Northeast Complex Fluids and Soft Matter Workshop, New Jersey Institute of Technology, Newark, NJ, May 2019.**
23. S. Sarkar^G and A. Košmrlj, “*Buckling of Thermalized Cylindrical Shells*”, **Frontiers in Applied & Computational Mathematics held jointly with the 11th Northeast Complex Fluids and Soft Matter Workshop, New Jersey Institute of Technology, Newark, NJ, May 2019.**
22. M. E. H. Bahri^G and A. Košmrlj, “*Influence of Thermal Fluctuations on the Mechanical Properties of 2D Anisotropic Materials*”, **Frontiers in Applied & Computational Mathematics held jointly with the 11th Northeast Complex Fluids and Soft Matter Workshop, New Jersey Institute of Technology, Newark, NJ, May 2019.**
21. P. Talledo^{REU}, M. Snoussi, N. Del Rosario, B.-Y. Ha, A. Košmrlj and S. Taheri-Araghi, “*Heterogeneous Absorption of Antimicrobial Peptide LL37 in Escherichia coli Cells Enhances Population Survivability*”, **APS March Meeting, Boston, MA, March 2019.**
20. S. Mao^{PD}, D. Kuldinow^{REU}, M. Haataja, and A. Košmrlj, “*Phase separation in multicomponent liquid mixtures*”, **Gordon Research Conference on “Complex Active & Adaptive Material Systems”, Ventura, CA, January 2019.**

2018

19. S. Tong^G and A. Košmrlj, “*Mechanics of wrinkled structures*”, **Summer School on Soft Solids and Complex Fluids, University of Massachusetts Amherst**, Amherst, MA, *May 2018*.
18. S. Sarkar^G and A. Košmrlj, “*Elastic multipole method for describing deformation of 2D solid structures*”, **Summer School on Soft Solids and Complex Fluids, University of Massachusetts Amherst**, Amherst, MA, *May 2018*.
17. S. Mao^{PD}, M. Haataja, and A. Košmrlj, “*Multi-component phase behavior inspired by membraneless compartmentalization*”, **Princeton Institute for the Science and Technology of Materials Annual Research Symposium, Princeton University**, Princeton, NJ, *March 2018*.
16. S. Sarkar^G and A. Košmrlj, “*Elastic multipole method for describing deformation of 2D solid structures*”, **Princeton Institute for the Science and Technology of Materials Annual Research Symposium, Princeton University**, Princeton, NJ, *March 2018*.
15. S. Mao^{PD}, M. Haataja, and A. Košmrlj, “*Multi-component phase behavior inspired by membraneless compartmentalization*”, **Princeton Center for Complex Materials Poster Night, Princeton University**, Princeton, NJ, *February 2018*.
14. S. Sarkar^G and A. Košmrlj, “*Elastic multipole method for describing deformation of 2D solid structures*”, **Princeton Center for Complex Materials Poster Night, Princeton University**, Princeton, NJ, *February 2018*.

2017

13. A. Košmrlj and D.R. Nelson, “*Statistical mechanics of microscopically thin thermalized structures*”, **Gordon Research Conference on “Soft Condensed Matter Physics”**, New London, NH, *August 2017*.
12. M. Heinrich^G, A. Košmrlj, “*Cell motility in the presence of sticky or slippery walls*”, **Summer School on Soft Solids and Complex Fluids, University of Massachusetts Amherst**, Amherst, MA, *May 2017*.
11. S. Sarkar^G and A. Košmrlj, “*Elastic multipole method for describing deformation of 2D solid structures*”, **Summer School on Soft Solids and Complex Fluids, University of Massachusetts Amherst**, Amherst, MA, *May 2017*.
10. A. Košmrlj and D.R. Nelson, “*Statistical mechanics of microscopically thin thermalized structures*”, **Gordon Research Conference on “Complex Active & Adaptive Material Systems”**, Ventura, CA, *January 2017*.

2016

9. S. Sarkar^G and A. Košmrlj, “*Elastic multipole method for describing patterns in mechanically deformed structures*”, **Summer School on Physics and Mechanics of Soft Complex Materials**, Cargese, France, *August 2016*.

2008-2015

8. A. Košmrlj and D.R. Nelson, “*Statistical Mechanics of Ribbons*”, **Gordon Research Conference on “Soft Condensed Matter Physics”**, New London, NH, *August 2015*.
7. A. Košmrlj and D.R. Nelson, “*Mechanical Properties of Warped Membranes*”, **Gordon Research Conference on “Soft Condensed Matter Physics”**, New London, NH, *August 2013*.
6. A. Košmrlj, A. K. Chakraborty, and M. Kardar, “*Thymic selection of T cells as diffusion with intermittent traps*”, **Mini Stat Mech Meeting, University of California Berkeley**, Berkeley, CA, *January 2011*.
5. C. C. Govern, A. Košmrlj, E. L. Read, and A. K. Chakraborty, “*How the T cell repertoire sees antigen; implications for control of HIV and autoimmunity*”, **NIH Director’s Pioneer Award Symposium**, Bethesda, MD, *September 2010*.

4. A. Košmrlj, E. L. Read, T. M. Allen, M. Altfeld, M. Carrington, B. D. Walker, and A. K. Chakraborty, “*Effects of thymic selection of the T cell repertoire on HLA-class I associated control of HIV infection*”, **Mini Stat Mech Meeting, University of California Berkeley**, Berkeley, CA, *January 2010*.
3. A. Košmrlj, E. L. Read, T. M. Allen, M. Altfeld, M. Carrington, B. D. Walker, and A. K. Chakraborty, “*Effects of thymic selection of the T cell repertoire on HLA-class I associated control of HIV infection*”, **NIH Director’s Pioneer Award Symposium**, Bethesda, MD, *September 2009*.
2. A. Košmrlj, M. Kardar, A. K. Chakraborty, “*How the thymus designs antigen-specific, yet cross-reactive, T cell receptor sequences*”, **Mini Stat Mech Meeting, University of California Berkeley**, Berkeley, CA, *January 2009*.
1. A. Košmrlj, A.K. Jha, E.S. Huseby, M. Kardar, and A. K. Chakraborty, “*How the thymus designs antigen-specific and self-tolerant T cell receptor sequences*”, **NIH Director’s Pioneer Award Symposium**, Bethesda, MD, *September 2008*.

ADMINISTRATIVE SERVICE

AY21-22	Academic Advisor for MAE Class of 2022 Freshman Academic Advisor MAE Undergraduate Committee Executive Committee for Program in Materials Science and Engineering Faculty Fellow for the Men’s and Women’s Volleyball teams
AY20-21	Academic Advisor for MAE Class of 2022 Freshman Academic Advisor MAE Undergraduate Committee Executive Committee for Program in Materials Science and Engineering Faculty Fellow for the Men’s and Women’s Volleyball teams MAE Graduate Admissions Committee
AY19-20	Academic Advisor for MAE Class of 2020 Freshman Academic Advisor MAE Undergraduate Committee Executive Committee for Program in Materials Science and Engineering Faculty Fellow for the Men’s and Women’s Volleyball teams MAE Graduate Admissions Committee
AY18-19	Academic Advisor for MAE Class of 2020 Freshman Academic Advisor MAE Undergraduate Committee MAE Lecturer Reappointment Committee SEAS Bioengineering Senior Faculty Search Committee Executive Committee for Program in Materials Science and Engineering Faculty Fellow for the Men’s and Women’s Volleyball teams MAE Graduate Admissions Committee
AY17-18	Academic Advisor for MAE Class of 2018 Freshman Academic Advisor SEAS Bioengineering Senior Faculty Search Committee Executive Committee for Program in Materials Science and Engineering Organizing PRISM seminars PRISM Lecturer Search Committee Faculty Fellow for the Men’s and Women’s Volleyball teams MAE Graduate Admissions Committee

- AY16-17 Academic advisor for MAE Class of 2018
 MAE Junior Faculty Search Committee
 Organizing PRISM seminars
 Executive Committee for Program in Materials Science and Engineering
 MAE Graduate Admissions Committee
- AY15-16 MAE Lecturer Search Committee
 MAE Graduate Admissions Committee

COURSES TAUGHT

Princeton University

2021	MAE223	Modern Solid Mechanics	scheduled
	MAE550/ MSE560	Lessons from Biology for Engineering Tiny Devices	7 students (5.0 rating)
2020	MAE223	Modern Solid Mechanics* (* Commendation for Outstanding Teaching)	57 students (4.5 rating)
	MAE550/ MSE560	Lessons from Biology for Engineering Tiny Devices* (* Commendation for Outstanding Teaching)	10 students (4.9 rating)
2019	MAE223	Modern Solid Mechanics* (* Commendation for Outstanding Teaching)	61 students (4.5 rating)
	MAE545	Lessons from Biology for Engineering Tiny Devices* (* Commendation for Outstanding Teaching)	20 students (4.8 rating)
2018	MAE223	Modern Solid Mechanics	71 students (4.4 rating)
	MAE545	Lessons from Biology for Engineering Tiny Devices* (* Commendation for Outstanding Teaching)	11 students (4.9 rating)
2017	MAE223	Modern Solid Mechanics	75 students (4.3 rating)
	MAE545	Lessons from Biology for Engineering Tiny Devices* (* Commendation for Outstanding Teaching)	11 students (4.9 rating)
2016	MAE223	Modern Solid Mechanics* (* Commendation for Outstanding Teaching)	52 students (4.7 rating)
2015	MAE545	Lessons from Biology for Engineering Tiny Devices* (* Commendation for Outstanding Teaching)	6 students (4.7 rating)

Previous Institutions

2010	5.70/10.546/20.465	Statistical Thermodynamics (teaching assistant)	MIT
2009	8.592	Statistical Physics in Biology (teaching assistant)	MIT

PROFESSIONAL ACTIVITIES

External Editor for the Proceedings of the National Academy of Sciences of the United States of America

Referee for the following Journals: Physical Review Letters; Physical Review X; Physical Review E; Physical Review B; Physical Review Applied; Physical Review Fluids; Proceedings of the National Academy of Sciences of the United States of America; Journal of the Mechanics and Physics of Solids; Extreme Mechanics Letters; Materials Today; Philosophical Transactions of the Royal

Society A: Mathematical, Physical and Engineering Sciences; Philosophical Transactions of the Royal Society B: Biological Sciences; Soft Matter; Nature Communications; Journal of Statistical Physics; Annals of Physics; PLOS Computational Biology; eLife; Physica D; Journal of Theoretical Biology; Journal of Molecular Biology; Computer Methods in Applied Mechanics and Engineering; Entropy; Europhysics Letters; European Physical Journal E; Journal of Engineering Mechanics; Micromachines; Mathematical Problems in Engineering

Ad hoc Referee for proposals submitted to: National Science Foundation (NSF); Army Research Office (ARO); Alfred P. Sloan Foundation; Israel Science Foundation (ISF); Netherlands Organization for Scientific Research (NWO); ACM Symposium on Computational Fabrication

Selection committee for: Fulbright Scholarships (2021)

Coordinating Fellowship programs for the American Slovenian Education Foundation (ASEF). Serving on the ASEF Board of Directors (2016-present). [web link]

Member of the Executive Committee for Northeast Complex Fluids and Soft Matter workshops (2018-present). [web link]

Sorting abstracts for the APS March Meetings (2017-present).

2022 Co-organizer (with A. Plummer), **Focus Session “Pattern formation in biological systems”, American Physical Society (APS) March Meeting**

Co-organizer (with Z. Chen), **Focus Session “Morphogenesis”, APS March Meeting**

Co-organizer (with P.-T. Brun), **Focus Session “Morphing matter: from soft robotics to 4D printing”, APS March Meeting**

Co-organizer (with P.-T. Brun, S. Datta, E. Davidson), **16th Northeast Complex Fluids and Soft Matter Workshop**, Princeton, NJ

2021 *Invited white paper* in the field of complex fluids and soft matter to facilitate **NASA’s Decadal Survey on Biological and Physical Sciences Research in Space 2023-2032**

Co-organizer (with M. Deserno, C. Marques, R. Dimova), **Virtual Kavli Institute for Theoretical Physics (KITP) Program “Physics of Elastic Films: From Biological Membranes to Extreme Mechanics”**, University of California Santa Barbara, Santa Barbara, CA [web link]

Co-organizer (with ASEF, U.S. Embassy Ljubljana), **Slovenian-American Virtual Academic Symposium** [web link]

Co-organizer (with Z. Chen), **Focus Session “Morphogenesis”, Virtual APS March Meeting** [web link J11, R11]

Co-organizer (with P.-T. Brun), **Focus Session “Morphing matter: from soft robotics to 4D printing”, Virtual APS March Meeting** [web link C07]

2020 Co-organizer (with ASEF, U.S. Embassy Ljubljana), **Slovenian-American Virtual Academic Symposium** [web link]

Co-organizer (with J. Morris, C. Colosqui, G. Drazer, Y.-N. Young), **13th Northeast Complex Fluids and Soft Matter Virtual Workshop** [web link]

Organized a **Tutorial** on “*Introduction to FEniCS for solving PDEs*” for the **Virtual KITP program “Symmetry, Thermodynamics and Topology in Active Matter”**, University of California Santa Barbara, Santa Barbara, CA [web link]

Co-organizer (with Z. Chen), **Focus Session “Morphogenesis”, APS March Meeting***, Denver, CO [web link X23, G26]

*APS March Meeting was canceled due to the COVID-19 pandemic. Focus Session was organized during the virtual APS March Meeting.

Co-organizer (with P.-T. Brun), **Focus Session “Morphing matter: from soft robotics to 4D printing”, APS March Meeting***, Denver, CO [web link A30, B30]

*APS March Meeting was canceled due to the COVID-19 pandemic. Focus Session was organized during the virtual APS March Meeting.

- 2019 Co-organizer (with F. Vernerey, C. Neu, O. Peleg, Z. Chen), **Symposium** “*Mechanics of growth, morphogenesis and evolution of biological solids*”, **Society of Engineering Science (SES) Annual Technical Meeting**, St. Louis, MO [web link]
- Co-organizer (with Z. Chen), **Focus Session** “*Morphogenesis*”, **APS March Meeting**, Boston, MA [web link A66, B66, C66, E66]
- Co-organizer (with S. Datta, I. Bourg), **Princeton Center for Theoretical Science (PCTS) Workshop** “*Transport in Disordered Environments*”, Princeton, NJ [web link]
- 2018 Organizer, “*Soft Materials for Polymer and Biological Systems*” **Session, Princeton Institute for the Science and Technology of Materials (PRISM) Annual Research Symposium**, Princeton, NJ
- Co-organizer (with Z. Chen), **Focus Session** “*Morphogenesis*”, **APS March Meeting**, Los Angeles, CA [web link E50, F50]
- Co-organizer (with C. Nelson, S. Shvartsman, L. Manning), **Princeton Center for Theoretical Science (PCTS) Workshop** “*Mechanics in Morphogenesis*”, Princeton, NJ [web link]
- 2017 Co-organizer (with H. A. Stone), **7th Northeast Complex Fluids and Soft Matter Workshop**, Princeton, NJ [web link]
- Organizer, **Invited Session** “*Mechanics in Morphogenesis*”, **APS March Meeting**, New Orleans, LA [web link R49]

OUTREACH ACTIVITIES

- 2020 Lectured in the **Princeton University Materials Academy (PUMA)**, which targets high school students from under-served communities and young women. [web link]
- Lectured at “**The Physics of Life Online Summer School**” organized by the Center for the Physics of Biological Function at Princeton University. [web link]
- 2019 Lectured at the “**Tower to Town Talk**” event in the Princeton Public Library. [web link]
- Participated at the “**Science day/Dia de la Ciencia**” event in Princeton, NJ. [web link]
- Lectured at the **TRIO Upward Bound** program for high school students in Trenton, NJ. [web link]
- 2018 Lectured at the “**Teachers as Scholars**” program for high school teachers. [web link]
- Lectured in **Princeton University Materials Academy (PUMA)**, which targets high school students from under-served communities and young women. [web link]
- Participated at the “**Science day/Dia de la Ciencia**” event in the Princeton Public Library. [web link]
- Professional Development Talk** about “*Guidelines for giving good talks*” for graduate students at Princeton University in the Mechanical and Aerospace Engineering department. [web link]
- Lectured at the **College Bound Conference** for high school students in New Jersey.
- Juror for the **National Young Physicists’ Tournament**, which is a team-oriented competition for high school students involving research, and presenting and defending the research results. [web link]
- 2017 Participated at the “**Materials Science Day**” event in the Princeton Public Library. [web link]
- Lectured in **Princeton University Materials Academy (PUMA)**, which targets high school students from under-served communities and young women. [web link]
- Participated at the “**Spring Science Expo**” event in the Princeton Public Library. [web link]

- 2016 LECTURED at the “**Teachers as Scholars**” program for high school teachers. [web link]
- Participated at the “**Materials Science Day**” event in the Princeton Public Library. [web link]
- Lectured in **Princeton University Materials Academy (PUMA)**, which targets high school students from under-served communities and young women. [web link]

POSTDOCTORAL TRAINEES [4 total; 3 current]

- | | |
|-----------------------------------|--|
| Abigail Plummer
(2021-present) | Princeton Center for Complex Materials Postdoctoral Fellow
<u>Research topic:</u> mechanics in morphogenesis
<ul style="list-style-type: none"> • Invited presenter at the <i>Rising Stars in Soft and Biological Matter Symposium</i> at the University of Chicago (2021) |
| Hongbo Zhao
(2021-present) | Princeton Bioengineering Initiative - Innovators (PBI2) Postdoctoral Fellow
<u>Research topic:</u> intracellular phase transition
co-advised with C. Brangwynne and S. Datta |
| Bezia Lemma
(2021-present) | <u>Research topic:</u> mechanics in morphogenesis
co-advised with C. Nelson |
| Sheng Mao
(2016-2019) | Postdoctoral Associate
<u>Research topic:</u> mechanics in morphogenesis, intracellular phase transition
<u>Current position:</u> Assistant Professor of Mechanics and Engineering Science, Peking University
<ul style="list-style-type: none"> • Best Poster Award at the FACM '19 held jointly with the 11th NCS workshop (2019) • Finalist for the APS GSNP Postdoctoral Speaker Award (2018) |

GRADUATE STUDENTS, THESIS [7 total; 5 current]

- | | |
|---|---|
| Yenan (Daniel) Shen
(2021-present) | Ph.D., Mechanical and Aerospace Engineering (expected)
<u>Research topic:</u> soft robotics
co-advised with N. Leonard |
| Anvitha Sudhakar
(2019-present) | Ph.D., Mechanical and Aerospace Engineering (expected)
<u>Research topic:</u> mechanics in morphogenesis |
| Tejas Dethé
(2019-present) | Ph.D., Mechanical and Aerospace Engineering (expected)
<u>Research topic:</u> phase separation, acoustic metamaterials
co-advised with H. Stone
<ul style="list-style-type: none"> • Summerfield Second Year Fellowship (2020-21) |
| Mohamed El Hedi Bahri
(2017-present) | Ph.D., Mechanical and Aerospace Engineering (expected)
<u>Research topic:</u> statistical mechanics of microscopic structures
<ul style="list-style-type: none"> • NSF GRFP Honorable Mention (2017) |
| Sijie Tong
(2016-present) | Ph.D., Mechanical and Aerospace Engineering (expected)
<u>Research topic:</u> mechanics of wrinkled structures
<ul style="list-style-type: none"> • Summerfield Second Year Fellowship (2017-18) |

Matthew A. Heinrich (2016-2021) Ph.D., Mechanical and Aerospace Engineering (2021)
Thesis: *Macroscopic tissue growth, expansion, and collision: Biophysical insights toward tissue sheet engineering strategies*
 co-advised with D. Cohen
Current position: Moderna, Inc.
 • APS DBIO Shirley Chan Student Travel Grant Award (2019)

Siddhartha Sarkar (2015-2021) Ph.D., Electrical and Computer Engineering (2021)
Thesis: *Multipoles, symmetry representations and thermal fluctuations in elastic systems*
Current position: Postdoc, University of Michigan–Ann Arbor

GRADUATE STUDENTS, VISITING RESEARCHERS [8 total; 0 current]

Nicholas Carrillo (Jun-Aug 2019) M.S., Physics, California State University, Northridge (2019)
Research topic: statistical mechanics of thermalized shells
Current position: Physics and Math Tutor at C2 Educational Centers
 • PRISM/PCCM Research Experience for Undergraduates

Jan Zavodnik (Aug-Oct 2018) M.S., Mechanical Engineering, University of Ljubljana, Slovenia (2019)
Research topic: mechanics of growing viscoelastic tissues
Current position: Ph.D. student, University of Ljubljana, Slovenia
 • American Slovenian Education Foundation (ASEF) fellow

Matevž Marinčič (Jul-Aug 2018) M.S., Physics, University of Ljubljana, Slovenia (2018)
Research topic: acoustic metamaterials
Current position: Ph.D. student, University of Ljubljana, Slovenia
 • American Slovenian Education Foundation (ASEF) fellow

Luka Starčević (Sep-Oct 2017) M.S., Mechanical Engineering, University of Maribor, Slovenia (2018)
Research topic: acoustic metamaterials
Current position: Engineer CAE Vehicle safety at MAGNA STEYR Fahrzeugtechnik, Austria
 • American Slovenian Education Foundation (ASEF) fellow

Žiga Gosar (Aug-Sep 2017) M.S., Physics, University of Ljubljana, Slovenia (2019)
Research topic: acoustic metamaterials
Current position: Ph.D. student, University of Ljubljana, Slovenia
 • American Slovenian Education Foundation (ASEF) fellow

Tristan Guyomar (May-Jul 2017) M.S., Physics, Ecole Normale Supérieure de Lyon, France (2019)
Research topic: lung morphogenesis
Current position: Ph.D. student, University of Strasbourg, France

Miguel Ruiz Garcia (Apr-May 2017) Ph.D., Physics, Universidad Carlos III de Madrid, Spain (2017)
Research topic: statistical mechanics of microscopic sheets
Current position: Assistant Professor of Applied Mathematics, Polytechnic University of Madrid, Spain

Veronika Cencen (Sep-Oct 2016) M.S., Biomedical Engineering, University of Ottawa, Canada (2017)
Research topic: receptor mediated endocytosis
Current position: Ph.D. student, Ecole Polytechnique Federale de Lausanne, Switzerland
 • American Slovenian Education Foundation (ASEF) fellow

RESEARCH ASSISTANTS [1 total; 0 current]

Andreia Fenley
(2017-2018) Research topic: statistical mechanics of sheets
Current position: Ph.D. student, Cornell University

UNDERGRADUATE STUDENTS, SENIOR THESIS [10 total; 1 current]

Sydney Hsu
(2021-2022) B.S.E., Mechanical and Aerospace Engineering (expected)
topic: *Development of an Origami Deployable CubeSat Aeroshell*

Cassidy Crone
(2020-2021) B.S.E., Mechanical and Aerospace Engineering (2021)
Thesis: *Formation and Simulation of Tunable Dimples on the Surface of a Symmetrical Airfoil*

Jessica Fan
(2019-2020) B.S.E., Mechanical and Aerospace Engineering (2020)
Thesis: *Designing a transitional NuFlex element for orthopedic walker boots for better recovery of lower leg injuries*
Current position: Ph.D. student, University of Pennsylvania

- Enoch J. Durbine Prize for Engineering Innovation (2020)
- Outstanding Senior Thesis in Materials (2020)

Hassaan Khan
(2019-2020) B.S.E., Mechanical and Aerospace Engineering (2020)
Thesis: *Mechanical Characterization of Self-Folding Thermoplastic Polystyrene Sheets*
Current position: Mechanical Design Engineer at Precision Combustion, Inc.

Lydon Kersting
(2018-2019) B.S.E., Mechanical and Aerospace Engineering (2019)
Thesis: *xPLOR: An Expandable Pack for Lightweight Outdoor Refuge*
Current position: Mechanical Engineer at SpaceX

- Enoch J. Durbine Prize for Engineering Innovation (2019)

Bartosz Kaczmarek
(2018-2019) B.S.E., Mechanical and Aerospace Engineering (2019)
Thesis: *Mechanical Behavior of Pressurized Rods: 3D Shape Transformations of Rod Networks via Local Curvature Control*
co-advised with P.-T. Brun
Current position: Ph.D. student, Stanford University

- First Prize Morgan W. McKinzie '93 Senior Thesis Prize (2019)
- Co-winner Sau-Hai Lam *58 Prize in Mechanical and Aerospace Engineering (2019)

Emily Achterkirch
(2018-2019) B.S.E., Mechanical and Aerospace Engineering (2019)
Thesis: *Analysis of Hockey Skate Blade Holders: An Investigation into Broken Skates by Reverse Engineering*
Current position: Associate Mechanical Engineer at BAE Systems

Dylan Baroody
(2018-2019) B.S.E., Mechanical and Aerospace Engineering (2019)
Thesis: *Analysis of Soft Phononic Crystals: Using Machine Learning to Predict Compression using Transmission Data*
Current position: Software Engineer at WHOOP

Yinan Zheng
(2018-2019) A.B., Physics (2019)
Thesis: *Buckling of Geometrically Frustrated Frames: Spin Model Approaches and Finite Element Analysis*
Current position: M.D. student, Vanderbilt University

M. Cecilia Stoner
(2016-2017)

B.S.E., Mechanical and Aerospace Engineering (2017)

Thesis: *Design and Analysis of Tunable Phononic Structures*

Current position: NASA Langley Research Center and Ph.D student, University of Virginia

- Second Prize Donald J. Dike Award for Excellence in Undergraduate Research (2017)
- Outstanding Leadership Award in Materials (2017)

UNDERGRADUATE STUDENTS, SENIOR PROJECT [2 total; 0 current]

2019-2020

Divyanshu Pachisia (MAE), Evan Quinn (MAE), Beimnet Shitaye (MAE), Jocelyn Wang (MAE)

Project: *Soft Eversion Robots in Application of Minimally Invasive Subsurface Drip Irrigation*

co-advised with A. Majumdar

2017-2018

Santiago Aguirre (MAE), Joshua Freeman (MAE), Colin Reilly (MAE), Benjamin Shi (MAE), Maxwell Schwegman (MAE)

Project: *Design and Development of a Compact Martian Solar Array*

- Finalists for the 2018 NASA Big Idea Challenge

UNDERGRADUATE STUDENTS, INDEPENDENT WORK [4 total; 0 current]

Wenyuan Hou
(Fall 2019)

B.S.E., Mechanical and Aerospace Engineering (2021)

Independent Work: *Mechanics of wrinkled structures*

Current position: Ph.D. student, Massachusetts Institute of Technology

- Co-winner Sau-Hai Lam *58 Prize in Mechanical and Aerospace Engineering (2021)
- Lore von Jaskowsky Memorial Prize, SEAS (2021)
- Outstanding Materials Student Award (2021)

Milena Chakraverti-
Wuerthwein
(Spring 2019)

A.B., Physics (2020)

Independent Work (JP): *Phase Separation in Multi-Component Liquid Mixtures*

Current position: Ph.D. student, University of Chicago

- Hertz Fellowship Award (2021)
- NSF Graduate Research Fellowship Award (2021)

Yinan Zheng
(Spring 2018)

A.B., Physics (2019)

Independent Work (JP): *Buckling of Geometrically Frustrated Frames using Spin Models*

Current position: M.D. student, Vanderbilt University

Beni Snow
(Spring 2017)

B.S.E., Mechanical and Aerospace Engineering (2019)

Independent Work: *Mechanical Properties of Randomly Crumpled Thin Sheets*

Current position: Design Engineer at Blue Origin

UNDERGRADUATE TEAMS IN COMPETITIONS/CHALLENGES [4 total; 0 current]

2020-2021

NASA Big Idea Challenge

Abhinav Agarwal (MAE), Saad Ayub (MAE), Benjamin Benjadol (MAE), Edoardo Contente (PHY), Daisy Bissonette (AST), Inci Karaaslan (PHY), Savannah Pobre (AST), Ethan Sample (CBE), Devdigvijay Singh (MAE), and Aditya Gandotra (PHY)

Project: *LIGHTSABER: A Lunar Dust Removal Technology*

2019-2020 **NASA Revolutionary Aerospace Systems Concepts Academic Linkage**
 Polina Zhilkina (MAE), Jacob Essig (WWS), Alex Essig (WWS), Nina Arcot (MAE),
 Hoang Le (ELE), Cindy Li (ELE), Nadine Duursma (visiting student from TU
 Delft), Naomi Oke (MAE), Sarah Witzman (MAE), Nancy Diallo (MAE), Shannen
 Prindle (MAE)
Project: *SELENE*

2018-2019 **NASA Micro-g Neutral Buoyancy Experiment Design Teams challenge**
 Nina Arcot (MAE), Alex Rogers (MAE), Whitney Huang (MAE), Kyle Johnson (ELE),
 Cindy Li and Hoang Le (Prospective ELE's '22), Alexander Essig (Woodrow Wilson),
 Jacob Essig and Elizabeth Petrov (Prospective COS's '22), Thomas McBride, Shaylee
 McBride, and Andrew Xu (Prospective MAE's '22).
Project: *Soft Robotic Gripper for Ocean Worlds*
 • Among the 4 teams invited to the second phase of the challenge

2017-2018 **NASA Big Idea Challenge**
 Santiago Aguirre (MAE), Joshua Freeman (MAE), Colin Reilly (MAE), Benjamin
 Shi (MAE), Maxwell Schwegman (MAE)
Project: *Design and Development of a Compact Martian Solar Array*
 • Among the 5 finalists invited to the NASA's Big Idea Forum

OTHER UNDERGRADUATE STUDENT RESEARCHERS [27 total; 2 current]
 (Includes REU students, summer interns, and visitors)

Alexander Ban (Jun 2021 - present)	B.S.E., Mechanical and Aerospace Engineering, Princeton University (expected) <u>Research topic:</u> statistical mechanics of sheets • MAE Summer Practical Research Experience
Josep Battaler i Umbert (February 2021-present)	B.A., Mathematics & Engineering Physics, Polytechnic University of Catalonia (expected) <u>Research topic:</u> phase separation in multicomponent mixtures
Yujin Angolio (Jun-Aug 2021)	B.S.E., Mechanical and Aerospace Engineering, Princeton University (expected) <u>Research topic:</u> self-folding origami • MAE Summer Practical Research Experience
Lauren Rawson (Jun-Aug 2021)	B.S.E., Mechanical and Aerospace Engineering, Princeton University (expected) <u>Research topic:</u> soft robotics • MAE Summer Practical Research Experience
Isa Kessinger (Jun-Aug 2021)	B.S.E., Mechanical and Aerospace Engineering, Princeton University (expected) <u>Research topic:</u> morphogenesis • MAE Summer Practical Research Experience
Kathryn-Alexa Kennedy (Jun-Aug 2021)	B.S.E., Mechanical and Aerospace Engineering, Princeton University (expected) <u>Research topic:</u> acoustic metamaterials • MAE Summer Practical Research Experience
Michael Hwang (Jun-Aug 2021)	B.S.E., Mechanical and Aerospace Engineering, Princeton University (expected) <u>Research topic:</u> self-folding origami • MAE Summer Practical Research Experience

Bryan O. Rivera-Rivera (Jun-Aug 2021)	B.Sc., Physics Applied to Electronics, University of Puerto Rico-Humacao (expected) <u>Research topic:</u> acoustic metamaterials <ul style="list-style-type: none"> • PRISM/PCCM Research Experience for Undergraduates
Steven K. Contreras (Jun-Aug 2021)	B.A., Economics, Rutgers University (expected) <u>Research topic:</u> rheology of tissues <ul style="list-style-type: none"> • Research Experience for Undergraduates: Computational Biology Research, Gateway to STEM
Sarah Fry (Dec 2020 - May 2021)	B.S.E., Mechanical and Aerospace Engineering, Princeton University (expected) <u>Research topic:</u> statistical mechanics of nanotubes
Pranav Iyer (Sep 2020 - May 2021)	B.S.E., Mechanical and Aerospace Engineering, Princeton University (expected) <u>Research topic:</u> rheology of growing tissues
Navreet Singh (Jun 2020 - Jun 2021)	B.S.E., Mechanical and Aerospace Engineering, Princeton University (expected) <u>Research topic:</u> rheology of vertex model tissues <ul style="list-style-type: none"> • MAE Summer Practical Research Experience
Polina Zhilkina (Jun 2020 - Jun 2021)	B.S.E., Mechanical and Aerospace Engineering, Princeton University (expected) <u>Research topic:</u> acoustic metamaterials <ul style="list-style-type: none"> • MAE Summer Practical Research Experience
Ritvik Agnihotri (Jun-Aug 2020)	B.S.E., Mechanical and Aerospace Engineering, Princeton University (expected) <u>Research topic:</u> statistical mechanics of sheets <ul style="list-style-type: none"> • MAE Summer Practical Research Experience
Marie Li (Jun-Aug 2020)	B.S.E., Mechanical and Aerospace Engineering, Princeton University (expected) <u>Research topic:</u> soft robotics <ul style="list-style-type: none"> • MAE Summer Practical Research Experience
Hunter Gaudio (Jun-Aug 2019) (with M. Haataja)	B.Sc., Mechanical Engineering, Villanova University (2020) <u>Research topic:</u> morphology of multicomponent liquid mixtures <u>Current position:</u> Translational Research Bioinformatics Engineer at Children's Hospital of Philadelphia Research Institute <ul style="list-style-type: none"> • PRISM/PCCM Research Experience for Undergraduates
Katherine Mumm (Jun-Aug 2019)	B.S.E., Mechanical and Aerospace Engineering, Princeton University (2021) <u>Research topic:</u> morphogenesis <u>Current position:</u> Entry-Level Engineer at KeyLogic Systems <ul style="list-style-type: none"> • MAE Summer Practical Research Experience
Tomisin Fasawe (Jun-Aug 2019)	B.S.E., Mechanical and Aerospace Engineering, Princeton University (2021) <u>Research topic:</u> acoustic metamaterials <u>Current position:</u> Program Manager at Microsoft <ul style="list-style-type: none"> • MAE Summer Practical Research Experience
Ekin Gurgen (Jun-Aug 2019)	B.S.E., Mechanical and Aerospace Engineering, Princeton University (2021) <u>Research topic:</u> mechanics of wrinkled structures <ul style="list-style-type: none"> • MAE Summer Practical Research Experience

Alfred Yoon (Jun-Aug 2019)	B.S.E., Mechanical and Aerospace Engineering, Princeton University (expected) <u>Research topic:</u> self-folding origami • MAE Summer Practical Research Experience
Derek Kuldinow (Jun-Aug 2018)	B.Sc., Physics, Yale University (expected) <u>Research topic:</u> intracellular phase separations <u>co-advised with</u> M. Haataja • PRISM/PCCM Research Experience for Undergraduates
Jessica Fan (Jun-Aug 2018)	B.S.E., Mechanical and Aerospace Engineering, Princeton University (2020) <u>Research topic:</u> epithelial sheets <u>co-advised with</u> D. Cohen <u>Current position:</u> Ph.D. student, University of Pennsylvania • MAE Summer Practical Research Experience
Bora Kiyani (Jun-Aug 2018)	B.S.E., Mechanical and Aerospace Engineering, Princeton University (2020) <u>Research topic:</u> acoustic metamaterials • MAE Summer Practical Research Experience
Jerry Xiang (Jun-Aug 2018)	B.S.E., Mechanical and Aerospace Engineering, Princeton University (2020) <u>Research topic:</u> acoustic metamaterials <u>Current position:</u> Research Assistant at Princeton Nuenergy • MAE Summer Practical Research Experience
Paul Talledo (Jun-Aug 2017)	B.Sc., Physics, California State University, Northridge (2017) <u>Research topic:</u> antimicrobial peptides <u>Current position:</u> Junior Specialist at University of California, Berkeley • PRISM/PCCM Research Experience for Undergraduates
Julian Castellon (Jun-Aug 2017)	B.S.E., Mechanical and Aerospace Engineering, Princeton University (2020) <u>Research topic:</u> acoustic metamaterials <u>Current position:</u> Mechanical Design Engineer at Tesla • MAE Summer Practical Research Experience
Jan Rozman (Jun-Aug 2016)	B.Sc., Physics, University of Ljubljana, Slovenia (2016) <u>Research topic:</u> development of drosophila oocytes <u>Current position:</u> Ph.D. student, University of Ljubljana, Slovenia • Princeton International Student Internship Program (ISIP) • American Slovenian Education Foundation (ASEF) fellow

STUDENT AND POSTDOC AWARDS (UG - undergraduate student, G - graduate student, PD - postdoc)

2021	Abigail Plummer	PD	Rising Stars in Soft and Biological Matter
	Milena Chakraverti-Wuerthwein	UG	Hertz Fellowship Award
	Milena Chakraverti-Wuerthwein	UG	NSF Graduate Research Fellowship Award
	Wenyuan Hou	UG	Co-winner Sau-Hai Lam *58 Prize in Mechanical and Aerospace Engineering
	Wenyuan Hou	UG	Lore von Jaskowsky Memorial Prize, SEAS
	Wenyuan Hou	UG	Outstanding Materials Student Award
2020	Tejas Dethe	G	Summerfield Second Year Fellowship
	Jessica Fan	UG	Enoch J. Durbine Prize for Engineering Innovation
	Jessica Fan	UG	Outstanding Senior Thesis in Materials

2019	Sheng Mao	PD	Best Poster Award at the FACM '19 held jointly with the 11th NCS workshop
	Matthew A. Heinrich	G	APS DBIO Shirley Chan Student Travel Grant Award
	Lydon Kersting	UG	Enoch J. Durbine Prize for Engineering Innovation
	Bartosz Kaczmariski	UG	First prize Morgan W. McKinzie '93 Senior Thesis Prize
	Bartosz Kaczmariski	UG	Co-winner Sau-Hai Lam *58 Prize in Mechanical and Aerospace Engineering
2018	Sheng Mao	PD	Finalist for the APS GSNP Postdoctoral Speaker Award
2017	Sijie Tong	G	Summerfield Second Year Fellowship
	M. Cecilia Stoner	UG	Second Prize Donald J. Dike Award for Excellence in Undergraduate Research
	M. Cecilia Stoner	UG	Outstanding Leadership Award in Materials

THESIS COMMITTEES (AS NON-ADVISOR) [12 total; 9 current]

2021-present	Isaac Breinyn	Ph.D., Quantitative and Computational Biology (expected) Advisors: Daniel J. Cohen
2019-present	Niki Abbasi	Ph.D., Mechanical and Aerospace Engineering (expected) Advisor: Howard A. Stone
2019-present	Gawoon Shim	Ph.D., Mechanical and Aerospace Engineering (expected) Advisor: Daniel J. Cohen
2019-present	Ruoyao Zhang	Ph.D., Mechanical and Aerospace Engineering (expected) Advisor: Mikko P. Haataja
2018-present	Trevor J. Jones	Ph.D., Chemical and Biological Engineering (expected) Advisor: Pierre-Thomas Brun
2018-present	Chenyi Fei	Ph.D., Quantitative and Computational Biology (expected) Advisors: Ned S. Wingreen and Bionnie L. Bassler
2018-present	Xiaohan Du	Ph.D., Mechanical and Aerospace Engineering (expected) Advisor: Craig B. Arnold
2018-present	Juliane I. Preimesberger	Ph.D., Mechanical and Aerospace Engineering (expected) Advisor: Craig B. Arnold
2018-present	Jessica L. Wilson	Ph.D., Mechanical and Aerospace Engineering (expected) Advisor: Howard A. Stone
2017-2021	Yang Xia	Ph.D., Mechanical and Aerospace Engineering Advisor: Mikko P. Haataja
2016-2021	Bryan A. Nerger	Ph.D., Chemical and Biological Engineering Advisor: Celeste M. Nelson
2016-2019	Renato Pagliara Vasquez	Ph.D., Mechanical and Aerospace Engineering Advisors: Naomi E. Leonard and Phil Holmes

PHD THESIS READER [14 total]

2021	Julienne M. LaChance	Ph.D., Mechanical and Aerospace Engineering Advisor: Daniel J. Cohen
2021	Nikita S. Dutta	Ph.D., Mechanical and Aerospace Engineering Advisor: Craig B. Arnold
2020	Thomas Hodson	Ph.D., Mechanical and Aerospace Engineering Advisor: Daniel A. Steingart
2020	Yingxian Estella Yu	Ph.D., Mechanical and Aerospace Engineering Advisor: Howard A. Stone

2020	Xinyi Minnie Liu	Ph.D., Mechanical and Aerospace Engineering Advisor: Craig B. Arnold
2019	Renato Pagliara Vasquez	Ph.D., Mechanical and Aerospace Engineering Advisors: Naomi E. Leonard and Phil Holmes
2018	Ching-Yao Lai	Ph.D., Mechanical and Aerospace Engineering Advisor: Howard A. Stone
2018	Jingjie Hu	Ph.D., Mechanical and Aerospace Engineering Advisor: Winston O. Soboyejo
2017	Yuanda Xu	Ph.D., Program in Applied and Computational Mathematics Advisor: Mikko P. Haataja
2017	Alta Fang	Ph.D., Mechanical and Aerospace Engineering Advisor: Mikko P. Haataja
2017	Jesse T. Ault	Ph.D., Mechanical and Aerospace Engineering Advisor: Howard A. Stone
2017	Tanya Gupta	Ph.D., Mechanical and Aerospace Engineering Advisor: Daniel A. Steingart
2017	Suin Shim	Ph.D., Mechanical and Aerospace Engineering Advisor: Howard A. Stone
2016	David J. Luet	Ph.D., Mechanical and Aerospace Engineering Advisor: Luigi Martinelli

EXAMINER ON FINAL PUBLIC ORAL EXAMS [6 total]

2021	Yang Xia	Ph.D., Mechanical and Aerospace Engineering Advisor: Mikko P. Haataja
2021	Bryan A. Nerger	Ph.D., Chemical and Biological Engineering Advisor: Celeste M. Nelson
2019	Rebecca Gray	Ph.D., Mechanical and Aerospace Engineering Advisor: Naomi E. Leonard
2019	Elizabeth N. Davison	Ph.D., Mechanical and Aerospace Engineering Advisor: Naomi E. Leonard
2018	Jasmin Imran Alsous	Ph.D., Chemical and Biological Engineering Advisor: Stanislav Shvartsman
2018	Farzan Beroz	Ph.D., Physics Advisor: Ned S. Wingreen