

**ASPEN
CENTER FOR PHYSICS
2018 Winter Conference**

**Data-driven Discovery and Design
in Soft and Biological Materials**

**January 7–13, 2018
Sunday evening reception
Meetings Monday through Friday**

Data-driven modeling approaches and machine learning have opened new paradigms in the understanding, engineering, and design of soft and biological materials. This Aspen Winter Conference aims to convene theoretical, computational, and experimental researchers and practitioners in physics, materials science, bioengineering, and chemical science to advance interdisciplinary collaboration and understanding in data-enabled materials and molecular design.

The promise of materials design through machine learning is great, and practitioners worldwide are beginning to embrace this new modality to design and engineer peptides, proteins, DNA, colloids, organic photovoltaics and semi-conductors, polymers, and hydrogels.

This event will bring together experimental and theoretical researchers in soft materials and biology, along with experts in machine learning, statistics, and applied mathematics, to define and codify the key directions, objectives, and methodologies for this field, and determine how to best engage physical modeling tools and experimental characterization techniques with one another and with data-driven tools to guide and accelerate soft and biological materials discovery and design.

Application deadline is October 31, 2017

Please complete your application at:

<http://www.aspenphys.org/physicists/winter/winterapps.html>

Conference Website: <https://tinyurl.com/AspenMaterials2018>

Organizers

Erik Luijten, Northwestern University
Gerard Wong, UCLA
Andrew Ferguson*, UIUC

*Denotes physicist in charge of diversity

**Proposals for the 2019 Winter Conferences are invited
and must be submitted by January 15, 2018**

The Aspen Center for Physics is committed to a significant participation of women and under-represented groups in all of its programs.

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The Aspen Center for Physics is supported by the National Science Foundation Grant No. PHY-1066293