ASPEN CENTER FOR PHYSICS

2024 WINTER CONFERENCE

STRINGS, FIELDS, AND DEEP LEARNING

JANUARY 14 - 19, 2024

Sunday evening welcome reception
Meetings Monday through Friday morning

Progress in deep learning has traditionally involved experimental data, but in recent years it has impacted our understanding of formal structures arising in theoretical high energy physics and pure mathematics, via both theoretical and applied deep learning. This conference will bring together high energy theorists, mathematicians, and computer scientists across a broad variety of topics at the interface of these fields. Featured topics include the interface of neural network theory with quantum field theory, lattice field theory, conformal field theory, and the renormalization group; theoretical physics for AI, including diffusion models and equivariant models; ML for pure mathematics, including knot theory and special holonomy metrics, and deep learning for applications in string theory and holography.

APPLICATION DEADLINE – AUGUST 31, 2023

PLEASE COMPLETE YOUR APPLICATION AT
http://www.aspenphys.org/physicists/winter/winterapps.html

Conference Website:
https://indico.cern.ch/event/1299185/

ORGANIZERS:

Miranda Cheng, Academia Sinica
Michael Douglas, Harvard University
James Halverson, Northeastern University
***Fabian Ruehle**, Northeastern University

*PHYSICIST IN CHARGE OF DIVERSITY

PROPOSALS FOR THE 2025 WINTER CONFERENCES ARE INVITED AND MUST BE SUBMITTED BY JANUARY 15, 2024

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

ASPEN CENTER FOR PHYSICS
700 West Gillespie Street
Aspen, Colorado 81611
970 925 2585
acp@aspenphys.org

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