

2024 SUMMER PROGRAM

May 26 to September 15, 2024

The program of the Aspen Center for Physics is based on individual and collaborative research and the informal exchange of ideas. Research interests include astrophysics, biophysics, condensed matter physics, dynamical systems, elementary particle physics, mathematical physics and statistical physics. In an environment free from normal distractions, the stimulating interaction among participants with diverse interests and backgrounds is one of the most fruitful aspects of the program. Opportunities for collaboration and for initiating new research are always available as colleagues from a variety of subfields are present throughout the summer. In addition to the unstructured program of Individual Research and Working Groups, Informal Workshops are also scheduled. Physicists who wish to pursue a serious program of research at the Center are encouraged to apply.

INDIVIDUAL RESEARCH – any physicist can apply in this category **May 26 to Sept 15**

WORKING GROUPS – for 2 to 6 collaborators **May 26 to Sept 15**

INFORMAL WORKSHOPS

Cosmic Ray Feedback in Galaxies and Galaxy Clusters **May 26 to June 16**

Fundamental Physics in the Era of Big Data and Machine Learning **May 26 to June 23**

The Microscopic Origin of Black Hole Entropy **June 2 to June 30**

Quantum Matter Through the Lens of Moiré Materials **June 16 to July 7**

Leveraging the Lepton Sector as a Probe for New Physics **June 23 to July 21**

Probing Collective Excitations in Quantum Matter by Transport and Spectroscopy **July 7 to Aug 4**

Physics of Biological Data Analysis **July 21 to Aug 18**

Multi-Messenger Binary Mergers & Stellar Explosions Transients **Aug 4 to Aug 25**

Accretion Physics in the Era of JWST **Aug 11 to Sep 8**

Tightening the Gap Between Scattering Amplitudes and Events at the LHC at Higher Orders **Aug 18 to Sept 15**

Toward a Holistic Understanding of the Multi-scale, Multiphase Circumgalactic Medium **Aug 25 to Sept 15**

The Aspen Center for Physics is committed to providing an inclusive and welcoming environment for all. The Center does not discriminate based on personal factors including (but not limited to) race, color, national or ethnic origin, alienage, age, religion, creed, sex, sexual orientation, gender identity or expression, marital status, political affiliation or philosophy, disability or veterans' status. An effort is also made to select a diversity of participants from a wide field of physics, ranging in experience from post-doctoral fellows to senior scientists, and representing a variety of institutions. Special consideration is given to physicists who have never participated or who have not participated recently. While there are no experimental facilities available, experimentalists are encouraged to participate in the Center's programs.

Many summer participants bring their families with them to Aspen. Numerous childcare and day-camp options are available within the Aspen/Snowmass area and current information and advice is available through the Center and local websites. Weekly picnics at the Center give families an opportunity to meet and share activities.

Individual participants must provide for their own expenses from their contracts, grants, fellowships or regular appointments. Through the National Science Foundation Grant # PHY-2210452, the Center provides partial financial support for the housing we arrange. Limited financial support is available for young physicists, women, members of underrepresented groups, and those with childcare obligations. Requests for financial support may be submitted through our application.

APPLICATION DEADLINE – JANUARY 31, 2024

MORE DETAILED INFORMATION AND ONLINE APPLICATIONS AT
<https://aspenphys.org/physicists/summer/program/currentworkshops.html>

PROPOSALS FOR 2025 ARE INVITED | SUMMER 2025 DUE JUNE 15, 2024. WINTER 2025 DUE JAN 15, 2024.
<https://aspenphys.org/physicists/proposals/index.html>

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

ASPEN CENTER FOR PHYSICS

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