

# ASPEN CENTER FOR PHYSICS

## 2020 SUMMER PROGRAM May 24 to September 13, 2020

The program of the Aspen Center for Physics is based on individual and collaborative research and the informal exchange of ideas. In an environment free from normal distractions, more than five hundred scientists from over a hundred U.S. and international institutions participate in the Center's summer program, with eighty to ninety in residence at any one time. Research interests include astrophysics, biophysics, condensed matter physics, dynamical systems, elementary particle physics, mathematical physics and statistical physics. 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.

**Individual Research**, any physicist can apply in this category  
**Working Groups**, for 2 to 6 collaborators

May 24 to Sept 13  
May 24 to Sept 13

### Informal Workshops

Nu Intersections: Neutrino Physics at a Crossroad  
Transport and Mixing of Tracers in Geophysics and Astrophysics  
From Chaos to Hydrodynamics in Quantum Matter  
Black Hole Formation, Accretion, and Outflows through Cosmic Time  
New Directions for Quantum Dynamics in Topological, Disordered,  
and Correlated Systems  
Data Driven Discovery in High-Throughput Biology  
T $\bar{T}$  Deformation, Generalizations, and Applications  
Galactic Archaeology with Fundamental Stellar Parameters:  
Synthesizing the Power of Accurate Ages with Distances,  
Chemistry, and Kinematics  
Electronic Topology across the Correlation Spectrum  
Dark Matter from the Laboratory to the Cosmos  
New Discoveries in the Era of High-Resolution, Low-Noise CMB Experiments  
Geometry and the Quantum

May 24 to June 14  
May 24 to June 14  
May 24 to June 21  
June 14 to July 5

June 14 to July 5  
June 21 to July 12  
July 5 to July 26

July 12 to Aug 2  
July 26 to Aug 16  
Aug 2 to Sept 6  
Aug 16 to Sept 13  
Aug 16 to Sept 13

**Physicists who wish to pursue a serious program of research at the Center are invited to apply. Applications by small working groups and independent researchers are *strongly encouraged*.** 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-1607611, the Center provides partial financial support for the housing we arrange.

## Application Deadline is January 31, 2020

**More detailed information and online applications at**  
<http://aspenphys.org/physicists/summer/index.html>

### **Proposals for the 2021 Summer Workshops are invited.**

Proposal information is available on our website at  
<http://aspenphys.org/physicists/proposals/index.html>

For full consideration, proposals should be submitted by May 30, 2020.

Those received after this date will be considered only in exceptional circumstances.

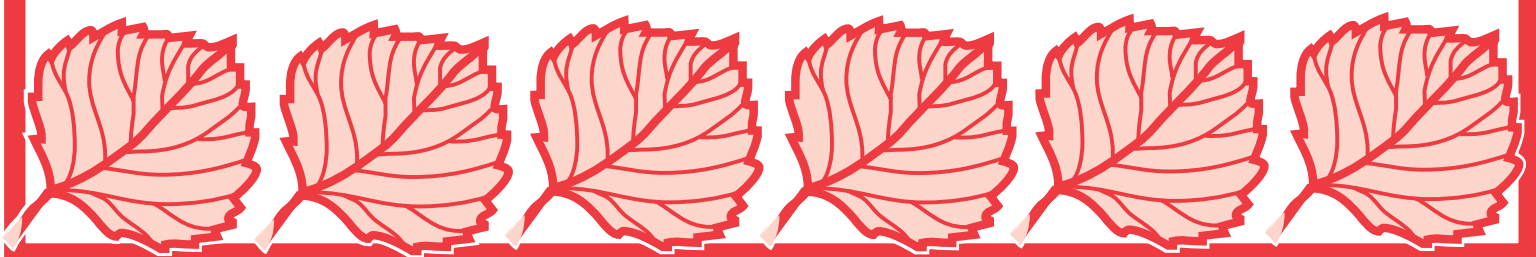
### **Proposals for the 2021 Winter Conferences are also invited.**

The deadline to submit them is January 15, 2020.

Aspen Center for Physics  
700 West Gillespie Street, Aspen, CO 81611  
phone: 970.925.2585 email: [acp@aspenphys.org](mailto:acp@aspenphys.org)

The Aspen Center for Physics is guided by a policy of equal opportunity and non-discrimination.

Programs are supported by the National Science Foundation Grant # PHY-1607611  
and corporate and private donations.





# PHYSICS IN ASPEN: SIMONS FOUNDATION GRANT

**Attend workshops in Astrophysics, Biophysics,  
Condensed Matter Physics or Particle Physics**

The rigorous selection process examines your publications and work in your field. Most successful candidates have finished their doctoral degrees. Applications are due by January 31, 2020 at [aspenphys.org](http://aspenphys.org).



**May 24, 2020 to  
September 13, 2020**

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**Come for two to five  
weeks to work on your  
own research or join one  
of 12 workshops**

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**The Simons Foundation  
Grant pays registration,  
housing and some travel  
for physicists from  
countries with  
inadequate science  
funding to attend the  
Aspen Center for  
Physics. ACP is a  
theoretical physics  
research center since  
1962. Over 1000  
scientists per year meet  
in the Rocky Mountains  
in Colorado, accessible  
by air or by driving from  
Denver.**

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