SIMONS-BALSEIRO POSTDOCTORAL POSITIONS

The Balseiro Institute, located in Bariloche, Argentina, invites applications for 6 postdoctoral positions, funded by the Simons Foundation through the Targeted Grants to Institutes program. The positions are open to candidates in all areas of theoretical physics, broadly defined, including condensed matter physics, high energy physics, and complex systems.

Appointments will begin in September 2025, with a duration of two years, with possible extensions to one more year. The stipend, free of taxes, will be approximately USD 2,000 per month.

Successful candidates should have expertise in one or more areas of theoretical physics; candidates working at the intersections of fields are also encouraged to apply. The selected postdoctoral scholars will work in collaboration with members of the theoretical physics groups at Balseiro Institute (see details below).

Applications should include a CV, a statement of research interests that identifies the preferred area(s) from the list below, a list of publications, and a minimum of two recommendation letters. The application deadline is April 10, 2025, and the results will be announced by April 30, 2025. The application materials should be sent to <u>simons@ib.edu.ar</u>.

For further information please contact simons@ib.edu.ar.

Theoretical Physics Groups at Balseiro Institute

The postdoctoral scholars will have the opportunity to collaborate with the following groups and researchers.

Condensed Matter Physics

The research activities carried out by this group include the description of topological phases of matter, strongly correlated electron systems, driven quantum systems and non-equilibrium statistical phenomena such as yielding and depinning.

Members of the group: A. Aligia, L. Arrachea, C. Balseiro, P. S. Cornaglia, D. Dominguez, J. I. Facio, E. Ferrero, D. Garcia, K. Hallberg, A. Hernandez Nieves, E. Jagla, A. Kolton, C. Proetto, M. J. Sanchez, G. Usaj, C. Ventura. More information: webpage of the group

Particles and Fields

The group's main focus is to understand the fundamental constituents of matter and their interactions, encompassing research in high-energy physics, astrophysics, cosmology, quantum field theory, string theory, and quantum information theory.

Members of the group: G. Aldazabal, I. Allekotte, H. Casini, L. Da Rold, C. Fosco, G. Golup, M. Huerta, J. Magán, F.D. Mazzitelli, S. Mollerach, E. Roulet, G. Torroba, R. Trinchero. More information: <u>webpage of the group</u>

Complex Systems

The research carried out by this group includes theoretical research on complex systems. The main lines of research are the following: Complex and out-of-equilibrium systems (Collective dynamics, Self-organization, Synchronization, Stochastic processes, Critical phenomena, Open quantum systems), Mathematical biology (Dynamics of ecosystems, Animal movement, Epidemic processes, Forest fires, Biological evolution, Modeling based on Machine Learning and Neural Networks), Socio-economic systems (Dynamics of social networks, Wealth distribution, financial markets, Opinion formation)

Members of the group: G. Abramson, S. Bouzat, A. Budini, M. Kuperman, L. Kazimierski, F. Laguna, K. Laneri, D. Schneider, D. Zanette. More information: <u>webpage of the group</u>