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The 1999 ICTP Prize in honour of Stig Lundqvist

in the field of Condensed Matter Theory

is awarded to

Daniel Domínguez

(Instituto Balseiro - Bariloche, Argentina)

Daniel Domínguez completed his Ph.D. in 1992 at the Instituto Balseiro - Bariloche, and was then a postdoctoral fellow at the ICTP and the Los Alamos National Laboratory in the US. He is now Professor of Physics at the Instituto Balseiro. In spite of his young age, he is one of the leading experts in the field of vortex dynamics in superconductors and Josephson junction arrays.

Professor Domínguez has made important contributions to the study of the collective non-linear dynamics of vortices in disordered superconductors and characterization of plastic flow and dynamic phase transitions in driven vortex lattices, to the study of the linear transport properties of high temperature superconductors, to the phenomenological theory of d-wave superconductivity including the response of granular systems to external fields and the dynamics of single-vortex in d-wave superconductors, to the study of the interaction of vortices with ultrasound, to the study and modelling of c-axis plasma resonance in Josephson coupled layered systems, as well as to the interpretation of Giant Fractional Shapiro Steps in Josephson junction arrays.

Apart from his fruitful research activities, Professor Domínguez is also actively involved in teaching at both the graduate and postgraduate levels at the Instituto Balseiro.