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for theoretical physics

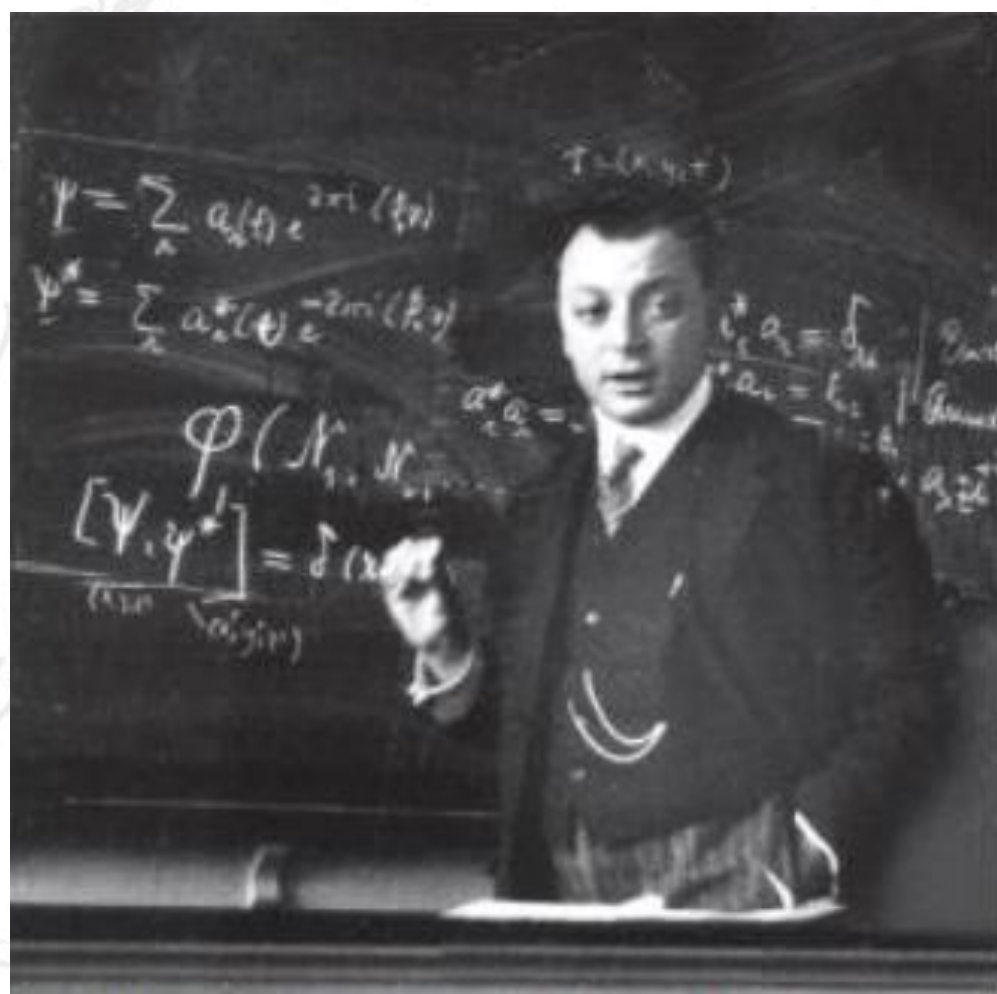
CLUSTER OF EXCELLENCE
QUANTUM UNIVERSE

CRC 1624
HIGHER STRUCTURES, MODULI
SPACES AND INTEGRABILITY

WPC Masterclass

14 - 17 January 2025

DESY Hamburg &
University of Hamburg



Invitation to Black Hole Thermodynamics

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Abstract: Since the work of Bekenstein and Hawking over half a century ago, it has been understood that although classically a black hole is a featureless object that satisfies a "no hair theorem", quantum mechanically a black hole behaves as a complex many-body system that obeys the laws of thermodynamics and statistical mechanics. I will provide an introduction to some of the old and new ideas in this subject, in which much is understood and much is not understood.

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More information
<https://indico.desy.de/event/46572>
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