

北京大学量子材料科学中心

International Center for Quantum Materials, PKU

Special Seminar

When Topology Meets Many-body Physics -- the Making of 2016 Nobel Prize in Physics

Prof. Yong-Shi Wu (吴咏时)

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Time: 4:00pm, July. 9, 2018 (Monday)

时间: 2018年7月9日 (周一) 下午4:00

Venue: Room W563, Physics Building, Peking University

地点:北京大学物理楼 西563

Abstract

The 2016 Nobel Prize in Physics has been announced to be awarded to three many-body theorists in the United States: David Thouless (half prize), F. Duncan Haldane and Michael Koserlitz (sharing the other half). The prize recognizes their pioneering research on topological phase transitions and topological phases. In this colloquium, the mathematics and physics behind the awardees' foundational breakthrough will be explained at a level accessible to physics students. The prospects of topological physics will be briefly discussed.

The speaker was fortunate to know and to collaborate with two of the prize winners in early 80's. Some of his personal experience with these science masters will be told too.

About the Speaker

Yong-Shi Wu is a Distinguished Professor in Theoretical Physics at University of Utah and Specially Appointed Professor at Fudan University. His research interests are focused in topological, geometric and algebraic structures underlying the fundamental laws in physics that unify all matter and forces in Nature, as well as emergent phenomena in fundamental physics and strongly correlated systems. His research fields cover quantum field theory, particle physics, statistical physics, string/M theory, topological matter and topological quantum computation. He graduated from Peking University in 1965 (in a six-year system), and joined the faculty of University of Utah in 1984. He has been invited to visit many world-famous institutions for theoretical physics. He is also a Fellow of American Physical Society.

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