DUANE PHYSICS, ROOM G1B20 | MONDAY, JULY 17 | 7 - 8 PM

Free Public Lecture

EXPLORING NEW QUANTUM HORIZONS

Quantum computers, machines that harness the power of quantum physics and have the potential to outperform their classical counterparts, have recently captured the public's imagination. Amidst the waves of hype and skepticism in the media, what is at the origin of the excitement and what is the real progress of this quest at the frontiers of quantum science and engineering? In this talk, I will delve into the motivations driving this quest, explore the current status of quantum computing, and present some recent results, including the realization of programmable quantum platforms with hundreds of quantum bits. I will also discuss the challenges and opportunities that lie ahead and drive a worldwide community in this cutting-edge field.

Giulia Semeghini, Assistant Professor of Applied Physics at Harvard University, is an experimentalist whose research centers on quantum simulation of complex materials and quantum information processing on neutral atom platforms. She received her Ph.D. from the University of Florence, and completed her undergraduate and master's work at the University of Milan.

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