



复旦大学物理系 Colloquium

Time: 14:00, Tuesday, 2024.5.7

Location: C108, Jiangwan Physics Building

Advances in superconducting quantum computing

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Abstract: Quantum computing is widely regarded as the next generation of computing technology because of its overwhelming advantage over classical computers in the processing power of certain problems, so it has attracted widespread attention. Superconducting solutions are currently attracting attention due to their good scalability, and major companies are investing in this field. This report will focus on the current status of superconducting quantum computing and its short-term and medium-term goals, and introduce a series of progress we have made in this direction.



Biography: Xiaobo Zhu, Professor, University of Science and Technology of China. In 2003, he received his PhD from the Institute of Physics, Chinese Academy of Sciences, and continued to work in the Institute; In 2008, he joined NTT Basic Research Laboratories; In 2013, he returned to China and joined the Institute of Physics, Chinese Academy of Sciences; In 2016, he joined the University of Science and Technology of China. His research focus is quantum computation and simulation with superconducting Josephson junctions. He has made a series of important works on the quantum hybrid system of flux qubit and NV color centers in diamonds. He also set several records for the maximum number of entangled superconducting qubits, developed the prototype of superconducting quantum computer "Zuchongzhi" and achieved quantum computational advantage.