

E6887 Topics in Info. Processing:

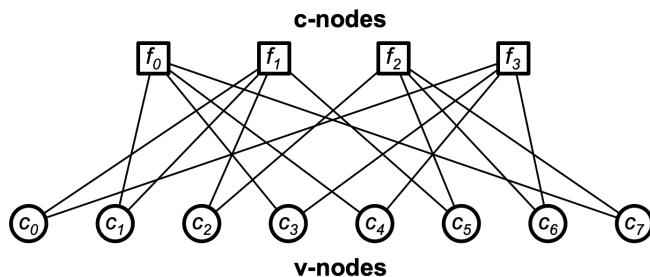
Classical and Quantum Error Correction Coding

Prof. Jin Hui, Tuesday 1:10-3:40 PM

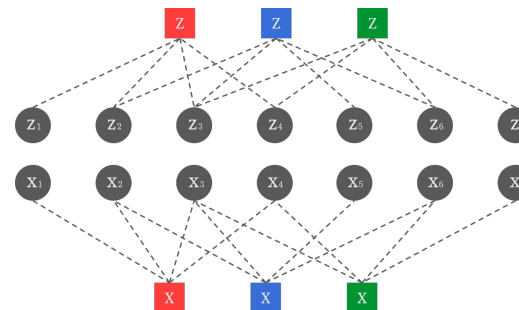
Study classical error correction coding principles and modern coding techniques, including convolutional codes, Turbo codes, and low-density parity-check (LDPC) codes

Learn quantum error correction codes, a foundational component of quantum computing, including Shor's code, Calderbank-Shor-Steane (CSS) codes, stabilizer codes, and basic quantum LDPC codes

LDPC Codes



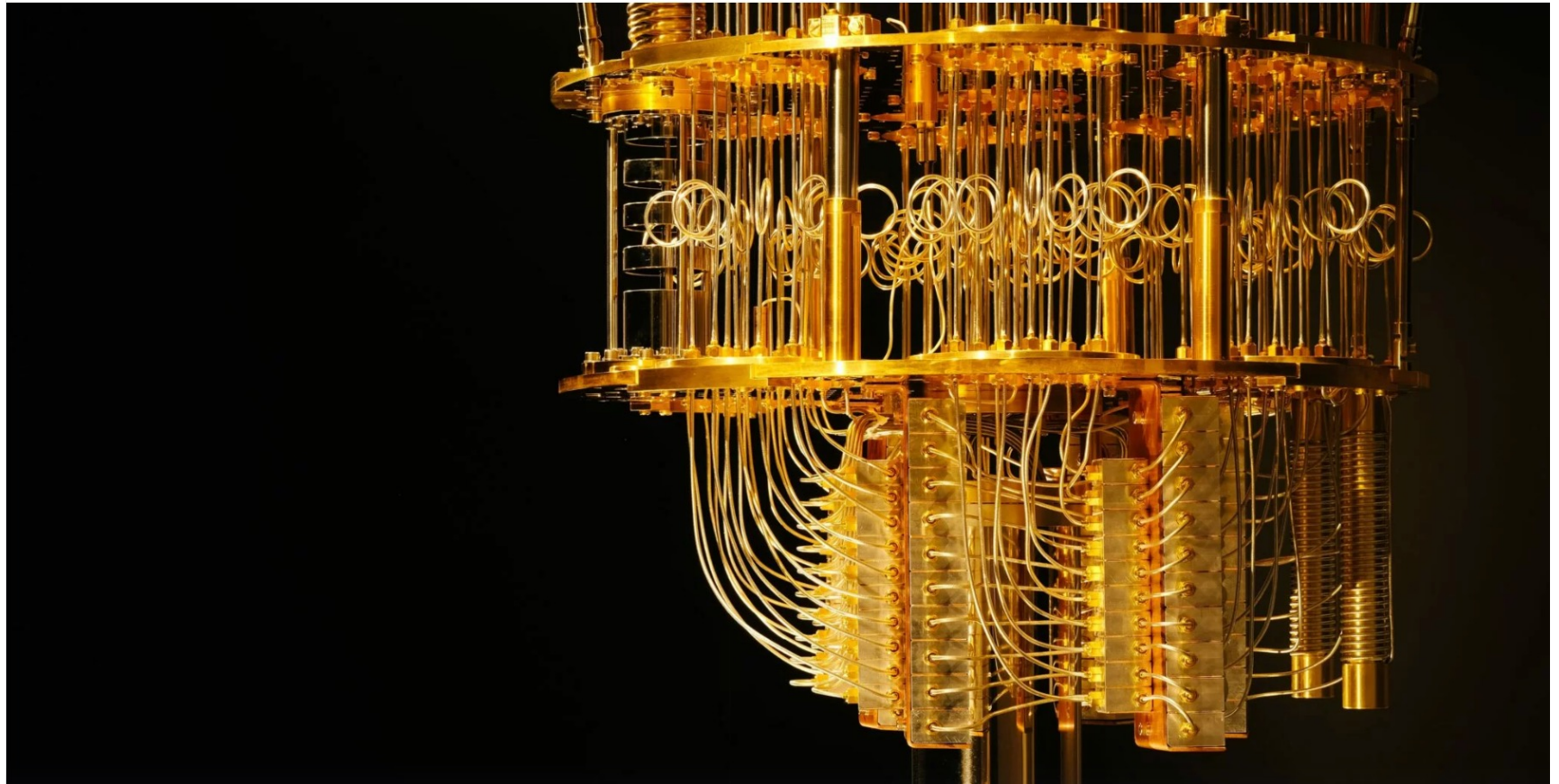
Stabilizer codes



IBM Quantum CTO Says Codes And Commitment Are Critical For Hitting Quantum Roadmap Goals

Quantum Computing Business, Research

Matt Swayne • April 10, 2025



- <https://thequantuminsider.com/2025/04/10/ibm-cto-says-codes-and-commitment-are-critical-for-hitting-quantum-roadmap-goals/>