Recent Developments in Quantum Technologies

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Abstract: The quantum theory of nature, formalized in the first few decades of the 20th century, contains elements that are fundamentally different from those required in the classical description of nature. Based on the laws of quantum mechanics, several recent discoveries have been reported that can revolutionize how we think about modern technologies. I will talk about such inventions in the field of computation as well as communication and some of our recent results in building measurement-based quantum computers.