

## **Internal Webinar**

## Applications of Ferromagnetic Insulator-Based Josephson Junctions

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Rise in demand for high computational power invariably comes with an increased energy cost. This has led to the need for low energy consuming ultra-fast electronics. Magnetic Josephson junctions are potential candidate devices for designing fast and energy efficient cryogenic devices. In this work, we demonstrate a simple trilayered Josephson device using ferromagnetic-insulator, with reliable non-volatile memory operation. Additionally, we have investigated non-reciprocal Josephson Effect and demonstrated ferromagneticinsulator based Josephson diode.

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