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Origins of Asymmetries in Ferroelectricity¹ CHUN-GANG DUAN, Key Laboratory of Polar Materials and Devices, East China Normal University — In this talk, we will discuss possible origins of asymmetries in ferroelectricity, i.e., two opposite polarizations are not exactly equivalent. We found that both extrinsic and intrinsic mechanism could result in asymmetric ferroelectricity. This asymmetry in ferroelectricity plays an important role in the design and fabrication of ferroelectric or multiferroic tunnel junctions, which could be the building blocks of next-generation information storage and processing devices.

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