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Iron Selenide thin films studied with ARPES FELIX SCHMITT, R.G. MOORE, SLAC Nat'l Accelerator Laboratory, J.J. LEE, Stanford University, W. LI, M. HASHIMOTO, Z.-X. SHEN, SLAC Nat'l Accelerator Laboratory — Dimensionality and length scales play an important role in material properties and their phases. Recently, superconductivity was discovered in a thin film of Iron Selenide just 1 unit cell thick. We have grown Iron Selenide films of different thickness with molecular beam epitaxy and measured these films in situ with angle-resolved photoemission spectroscopy (ARPES). The ability to measure films in situ eliminates the need for Se capping and provides high quality ARPES data. We will discuss these results, among them what changes can be observed in the band structure between films of different thicknesses.

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