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HIGH-EFFICIENCY SPIN-RESOLVED ARPES OF A TOPOLOGICAL INSULATOR WITH THE SPIN-TOF ANALYZER

The demanding but powerful technique of spin-resolved ARPES has been gaining momentum due to an increasing demand for probing the spin degree of freedom in a wide variety of materials. The 3D topological insulators are one such material that has helped push the technique forward due to its characteristic momentum-dependent spin texture. I will present an overview of the spin-TOF analyzer, which was developed at the ALS for high efficiency spin-ARPES by combining the time-of-flight technique with low energy exchange scattering. I will also present recent experiments that reveal widespread spin polarization in photoemission from a topological insulator.