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Title: An experimentalist's guide to the matrix element in angle resolved photoemission

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Highlights:

- A comprehensive introduction to the art of angle resolved photoemission (ARPES) is presented.
- Matrix element effects, i.e. the angular variation of ARPES spectral weight, is described by a nearly free electron final state model.
- ARPES spectral weight of a given Bloch band is essentially determined by the momentum distribution of its associated Wannier orbital times a polarization dependent pre-factor.
- Experimental handedness and improper polarization introduces dichroism.
- Instructive showcases from the world of modern ARPES are discussed.

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