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Shifts from a distant neighboring resonance E.A. HESSELS, M. HORBATSCH, York University — The linecenter of a resonance is affected by the presence of neighboring resonances due to quantum interference between the two resonant processes. Such shifts must be accounted for in high-precision measurements, but are easily overlooked. We develop an analytic formulation for the effect in the simplest case of a three-level atom. The shifts in this model system are large enough to be of concern for precision measurements.

Eric Hessels York University

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