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Dynamic response of a single-electron transistor in the ac Kondo regime THANH NGUYEN, CARLOS BOLECH, NAYANA SHAH, Department of Physics, University of Cincinnati — A single-electron transistor (SET) consisting of a small conducting island contacted by macroscopic conductors can be used to study strongly correlated electrons in artificial systems. SETs also provide possibilities of exploring non-equilibrium Kondo phenomena by applying source-drain voltage. In the context of recent measurements, we will discuss the non-trivial dynamics that emerges when externally imposed energy scales compete with the Kondo correlations. The response of the system to a simultaneous application of a magnetic field and a high-frequency modulation of the SET voltages will also be reported.

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