Parametric amplification in a DC SQUID amplifier at 1.7 GHz
JOSE AUMENTADO, LAFE SPIETZ, K.D. IRWIN, NIST — At NIST we have recently developed a DC SQUID-based microwave amplifier employing a resonant input circuit. In conventional operation this amplifier can be operated in a linear, phase-preserving mode. However, it can also be operated as a degenerate parametric amplifier with the SQUID functioning as a first stage amplifier. We will discuss the performance of this hybrid operation and the possibility of generating squeezed states in this system.