

Abstract Submitted
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Generation of Nonclassical States of Microwave Radiation via Single Photon Detection EMILY PRITCHETT, LUKE GOVIA, FRANK WILHELM, Saarland University — We describe the creation of nonclassical states of microwave radiation via ideal dichotomic single photon detection, i.e., a detector that only indicates presence or absence of photons. Ideally, such a detector has a back action in the form of the subtraction operator. Using the non-linearity of this back action, it is possible to create nonclassical states of microwave radiation, including squeezed and cat-like states, starting from a coherent state. We discuss the applicability of this protocol to current experimental designs of Josephson Photomultipliers (JPMs).

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