

APPLICATION OF MILLIMETER WAVE RECEIVERS TO ASTRONOMY

T. G. Phillips
Bell Laboratories
Murry Hill, New Jersey
and
Queen Mary College
University of London
London, England
and

K. B. Jefferts
Bell Laboratories
Murry Hill, New Jersey

ABSTRACT

Millimeter wave receivers are discussed from the point of view of applications of line astronomy. A heterodyne bolometer system is described which has a noise temperature of 300°K at 230 GHz. It is expected that these receivers will extend the range of radio line astronomy to about 500 GHz.