Abstracts

Microwave instrumentation for radio astronomy

J.C. Webber and M.W. Pospieszalski. "Microwave instrumentation for radio astronomy." 2002 Transactions on Microwave Theory and Techniques 50.3 (Mar. 2002 [T-MTT] (50th Anniversary Issue)): 986-995.

Radio astronomy is a branch of science that allows observation of natural radio signals from cosmic sources. Microwave techniques are employed in large radio telescope systems in diverse ways. Starting with early vacuum tube receivers at meter wavelengths, low-noise receivers have pushed the leading edge of technology, culminating in present-day receivers employing HFET amplifiers, superconducting tunnel junctions, and other advanced receiving elements. We discuss the principles of such devices, modern receivers, and modern radio telescope systems both operational and under development.

❑ Return to main document.