Abstracts

50 Years of Radio Astronomy

P.G. Mezger. "50 Years of Radio Astronomy." 1984 Transactions on Microwave Theory and Techniques 32.9 (Sep. 1984 [T-MTT] (Special Centennial Issue Historical Perspectives of Microwave Technology)): 1224-1229.

Contrary to most other branches of science, the birth of radio astronomy can be very accurately pinned down. In the early thirties Carl Guthe Jansky, an engineer at Bell Telephone Laboratories, was investigating atmospheric noise at 14.6-m wavelength with a highly directional antenna. He found that the antenna noise attained a maximum which shifted in time by 4 min per day, the difference between stellar time and solar time. He identified the direction of the maximum intensity with the position of the center of our Galaxy. He had discovered what we now know to be the diffuse galactic synchrotrons emission, caused by relativistic electrons, which gyrate in the galactic magnetic field. Jansky published his discovery of the galactic origin of the observed antenna noise in the Proceedings IRE in 1933. Therefore, this year, we celebrate the 50th birthday of radioastronomy.

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