is a gravitational resistive instability. This instability is sufficiently rapid, and it develops electric fields of sufficient magnitude to explain observed particle acceleration in solar flares. The instability also causes the plasma-field configuration to break up into fine filaments, in agreement with observations. This fine-scale structure effects a decoupling of the plasma and magnetic fields, permitting the overlying mass of gas to sink to the photosphere and the compressed magnetic field to relax to a force-free state; energy released in this phase corresponds to the main part of the light curve of a flare.

The Continuous Spectrum and Line Blanketing for Procyon. F. D. TALBERT AND F. N. EDMONDS, JR., *McDonald Observatory*.—Low-dispersion photoelectric spectrum scans coupled with high-dispersion coude plates have been used to construct an empirical continuum of Procyon corrected for line blanketing. Blanketing factors for 25 Å intervals in the range $\lambda\lambda 3025$ –4100 have been determined. The straight-line extrapolation method of Canavaggia and Chalonge has been used to determine the continuum in the near ultraviolet, $\lambda\lambda 3650$ –4000, and concordant results have been obtained from a determination based on matching observed and computed profiles of the Balmer lines in this wavelength range.

Comparison of the empirical continuum with that predicted by several model atmospheres calculated for Procyon indicate moderate discrepancies in the ultraviolet. Possible causes for these discrepancies are discussed.

Observations of Lunar Occultations of Kepler's Supernova at 800 Mc/sec. J. L. TALEN, *Radio Astronomy Observatory*.—Lunar occultations of Kepler's supernova of the year 1604 were observed at a frequency of 800 Mc/sec (37.5 cm wavelength) with the 85-ft radio telescope. In 1963, immersion and emersion were observed on 14 April and 4 July; emersion on 28 August. An outline of the extended source was found by plotting the limb of the moon for positions corresponding to the times of commencement and terminus of the occultation records.

The source outline is nonsymmetrical and has an over-all dimension of four by seven minutes of arc extending principally in a north-south direction. There is evidence that the source is composed of two large closely spaced components with no pronounced deviation from a uniform brightness distribution over each component. The position of the center of the source is right ascension $17^h 27^m 43^s \pm 2^s$ and declination $-21^\circ 28'1 \pm 0'5$ (1950.0). This

position is 1.5 min of arc from the optical position reported by Baade (*Astrophys. J.* 97, 119, 1943).

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A Search for the Galactic Corona at 234 Mc/sec. K. C. TURNER AND B. F. BURKE, *Carnegie Institution of Washington*.—A 234 Mc/sec survey of the entire sky visible with the 300-ft transit telescope of the NRAO at Green Bank has been completed. The observing time was compressed by driving the telescope in declination at its highest drive rate, sweeping a band of sky 50° wide each night. Successive observations were interleaved, giving an effective coverage in right ascension every 2 min, i.e., nearly every half-power beamwidth. The principal purpose of the survey was to test the existence of a galactic corona, or halo. If one defines the corona as a spheroidal, continuous distribution of emissivity, we find no evidence for it at 234 Mc/sec. The observed background continuum can be adequately fitted by a disk, plus an isotropic component, agreeing with Baldwin's most recent interpretation of the Cambridge 178 Mc/sec observations. In addition to the background survey, data have been collected at the positions of all discrete sources in the revised 3C catalogue.

First Results with the National Radio Astronomy Observatory Interferometer. W. C. TYLER, D. E. HOGG, AND C. M. WADE, *National Radio Astronomy Observatory*.—The NRAO interferometer consists of two 85-ft paraboloidal antennas on a baseline at azimuth 242° . One antenna is at a fixed location, and the other can occupy any of six stations at intervals of 300 m between 1200 and 2700 m from the first. The present operating wavelength is 11.1 cm.

Observations to date have been made at the 1200, 1500, and 2400 m stations. Two programs are now in progress. The first program is aimed at finding positions for small-diameter radio sources with an accuracy of $2''$ of arc. The purpose of the second is to study the structure of a large number of sources. The first results of these programs are described.

Frequency and Polarization Structure of Jupiter's Decametric Emission on a 10 msec Time Scale. J. W. WARWICK AND M. A. GORDON, *University of Colorado and High Altitude Observatory*.—In the fall of 1964 we made observations of Jupiter's decametric emission with the Arecibo 1000-ft radio telescope and a high-speed radiospectrograph.