KL 17. Has Weber* Observed Gravity Radiation? J. P. WESLEY, Uni. Missouri-Rolla.--Weber's naive handling of data has led him to erroneous conclusions. Taking Weber's threshold for signals from which coincidences are selected, in 81 days 30 accidental coincidences should be observed -- Weber reports 17. Since the large amplitude discrepancy between two coincident signals could not be produced by gravity radiation, it is almost certain the signals are independent thermal events. Since 6 detectors were used and only 3 quadruple coincidences were reported, while a gravity wave should excite all detectors; there is only about 1 chance in 10^5 that gravity radiation was detected. Weber erroneously ascribes significance to coincidences which occur close together in time. Theoretically there is no known source for such energetic gravity waves which occur so often (17 times in 81 days) and for so brief a duration (0.4 sec.). There is no adequate evidence for the detection of gravity radiation.

*J. Weber, Phys. Rev. Letters 22, 1320 (1969).

KL 18. Cosmological worldmodels and observational data.* N. S. RAJA RAO, Purdue University.--We have developed a method for assigning a relative likelihood to any particular cosmological model. Illustrative apparent magnitude and red-shift data and their associated uncertainties, available in recent literature, are used to assign relative likelihoods to the three parameter family of Friedmann models and the steady state model. For the case of zero cosmological constant, we find for spherical models, larger likelihoods than for the Euclidean or hyperbolic models, although the latter also have high likelihoods. The steady state model appears very unlikely. New results for models with non-zero cosmological constant will be discussed.

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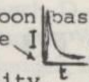
KL 19. USA-Moon Baseline Will Confirm that the "Elementary Particles" Producing Pulsar Pulses Responsible for Crab's>10^{100}eV are Trions. JOSEPH G. BARREDO, CSIC.-As 6319 km NRO-Onsala baseline did, USA-Moon baseline will confirm that, if the initial time of single pulsar pulses is recorded with fast enough rise-time



devises, the intensity, I, as a function of time t, is given by the constantless Eq. $I=N^2/r=N^2t^{-1/2} = t^{-3/2}$ (1). Eq.(1) shows: (a) The timeless-jumps (quanta) and the space-time concepts are oversimplifications of the trionprotodynamicsymmetry +•r+-•r→+ which rotating energy transformed into radiating energy by the recombination of charges is responsible for both the Crab's 10^{100}eV and the pulsar non-sinosoidal period variatiions (AUC 2178) (b) Einstein spent >30 years trying to introduce Mach's principle into relativity unsucessfully because Mach was unable to enunciate his principle as a function of the total number of charges in the Universe and their configuration, as represented by N in Eq.(1). (c) As many "elementary particles" as desired (like 1,278 and 1,318 MeVA_2) can be found (one for each value of r). They cannot be explained or even classified by the "quark" because the "quark" is an oversimplified trion.

KL 20. Vibrational Relaxation Measurements of the 10^00 and 02^00 States of CO_2 by Tuned Laser Spectroscopy.* DONALD J. ECKSTROM and DANIEL BERSHADER, Stanford Univ. - - A diffraction grating-tuned CO_2 laser together with a suitable IR detector is used as a light source to examine absorption history of several individual lines of the (00^01-02^00) and (00^01-10^00) vibration-rotation bands of CO_2 following passage of a shock wave through a test sample. In this way, the relaxation time of the vibrational-rotational state corresponding to the lower level of the laser transition can be determined. Such selectivity permits separate study of the relaxation of two different vibrational modes of CO_2. The data should tell also whether a Boltzmann distribution is maintained among the rotational states during vibrational excitation. Measurements have been made on a single line in each of the bands over a temperature range from 450 to 2000°C, and on 25 lines in the 9.4μ band at 900°C. Results will be discussed.

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