

Abstract Submitted
for the DFD15 Meeting of
The American Physical Society

Microwaves from Extra Galactic Radio Pulsars are found to deflect at Impact Parameters corresponding to the Plasma Limbs of the Sun and Stars EDWARD DOWDYE, Pure Classical Physics Research — Findings show that the microwaves from the extra galactic radio pulsars appear to deflect at impact parameters corresponding to the plasma limbs of the sun and the stars. The past century of astrophysical observations show that the bulk of gravitational light bending effects has been observed primarily at the plasma limb of the sun. The gravitational light bending rule of General Relativity predicts that gravitational bending of all waves in vacuum as well as in plasma. With current technical means in Astrophysics, the gravitation light bending effect should be an easily detectable effect for impact parameters corresponding to several solar radii above the plasma limb of the sun. Findings show that the gravitational bending in the plasma atmosphere of the sun appears to represent an indirect interaction that takes place between the gravitational gradient field of the sun and the microwaves from the radio pulsar sources. A minimum energy path calculation, supporting this argument, leads to a derivation of the very same light bending equation obtained from the assumptions of General Relativity. This was confirmed by a measurement on the gravitational deflection of microwaves at the Solar plasma limb by Lebach et al. (1995), who used a very-long-baseline-interferometer (VLBI) technique to determine the value of 0.9998 ± 0.0008 times that of General Relativity. The reason Einstein rings are not abundantly observed in the star-filled night skies is due primarily to the low impact parameter deflections within the plasma limb of the lensing stars.

Edward Dowdye
Pure Classical Physics Research

Date submitted: 18 Apr 2015

Electronic form version 1.4