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### **The ISM is Aglow in UV Radiation**

**Author Block:** Richard Conn Henry<sup>1</sup>, J. Murthy<sup>2</sup>, N. V. Sujatha<sup>2</sup>

<sup>1</sup>*Johns Hopkins Univ.*, <sup>2</sup>*Indian Institute of Astrophysics, India.*

*Abstract:* We have verified the conclusion of Henry (1991) that there is a ubiquitous cosmic UV background at 1500 Å, that is not present at shorter wavelengths, by carrying out a comparison of the diffuse ultraviolet background at 1500 Å in the GALEX FUV imager with the corresponding diffuse background at 1100 Å, as observed by us with Voyager 2. In the latter case, we often observe only an upper limit of about 30 photon units. In the former, there is invariably a background of greater than or equal to 300 photon units. GALEX does contain a time-dependent background of uncertain size; could this be the explanation?

We have also taken averages of our 430 Voyager spectra, and find that a background radiation field often kicks in at about 1050 Å which would correspond to dust-scattered starlight from a B8 star.

Finally, simple modeling of the galactic latitude dependence of the 1500 Å excess glow shows that it is consistent with what would be expected if the baryons of the interstellar medium were emitting UV radiation after being struck by neutralinos, the radiation subsequently being partially absorbed by interstellar dust.

We also expect to report the result of modeling to test the more conservative idea that the excess background is due to dust-scattered starlight, and that the difference between what is observed at 1550 Å and what is observed at 1100 Å is due to differences in the stellar sources dominant at each wavelength.

Henry, R. C. 1991, ARAA, 29, 89