

MODELING THE MULTI-WAVELENGTH SPECTRUM OF THE γ -RAY SOURCE LSI+61^o303

Denis A. Leahy

Dept. of Physics and Astronomy, University of Calgary, AB, Canada T2N 1N4.
leahy@iras.ucalgary.ca

Considerable interest has centered around LSI+61^o303 since 1977 when it was discovered to be strong, variable radio source and proposed to be the counterpart of the COS-B γ -ray source 2CG0135+01 (Gregory, Taylor, 1978, Nature, 272, 704). The radio light curve exhibits outbursts whose periodicity corresponds to the optical periodicity of the orbital motion. LSI+61^o303 has been also identified as an x-ray and an MeV γ -ray source. The multi-wavelength spectrum is summarized in Harrison et al. (2000, ApJ, 528, 454) and Leahy et al. (1997, ApJ, 475, 823). Here a new emission model is constructed. It is strongly constrained in order to be consistent with the observed emission from radio wavelengths through to γ -rays.