EXTRAGALÁCTICA

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MODELING THE RADIO FLARING BEHAVIOUR OF OV236

Luiz Claudio Lima Botti[1], Flavio Eler de Melo[1,2], Marcia Auta dos Santos[3]
1 - CRAAM/INPE
2 - Escola Politecnica/Universidade de Sao Paulo
3 - CRAAM/Mackenzie

We present a procedure to obtain the observed characteristics of synchrotron outburts in relativistics jets. We have used a representative radio long-term light-curves of OV236 at 4.8,8.0,14.5,22.0 and 43.0 GHz to derive the spectral and temporal evolution of a typical outburst. The technique consists in an analysis and decomposition of these light curves into a series of 16 identical flares. We fit the same outbursts simultaneously to 3 light curves covering 3 frequencies (4.8;8.0;14.5 GHz) at radio domain. The development of a flare is a function of time and frequency. We find that the obtained outburst's evolution is in satisfactory qualitative agreement with the expectations of shock models in relativistic jets. The main goal was to obtain the spectral and temporal characteristics of a typical flare. Individual flares differ only by a few parameters when compared with a typical flare. Marscher and Gear identified three stages of the evolution of the shock according to the dominant cooling process of the electrons: the Compton scattering loss phase, the synchrotron radiation loss phase and the adiabatic expansion loss phase. We thank M. Aller and M. Turler for helpful discussions.This research has made use of data from the University of Michigan Radio Astronomy Observatory which has been supported by the University of Michigan and the National Science Foundation. This work was partially supported by the Brazilian agency CNPq.