Contribution ID: **431** Type: **not specified**

Modelling Polarization by the Inverse Compton Scattering Process

Tuesday, 4 July 2017 15:00 (20 minutes)

Synchrotron Radiation(SR) and Inverse Compton Scattering(ICS) are the two prime processes which lead to X-Ray and Gamma Ray emission in Gamma Ray Bursts and Active Galactic Nuclei. We focused on the ICS of relativistic electrons on target photon fields and studied the polarization of outgoing photons. We present the results by analyzing the cross section of the scattering process and the associated Stokes Parameters, considering initially unpolarized photons with no preferred incoming direction. The calculations were done over the whole energy spectrum for both thermal and non-thermal distributions of electrons.

Presenter: Mr SINGH, Baibhaw (Indian Institute of Technology,Kharagpur,India)

Session Classification: Astrophysics