

Service d'Astrophysique
SÉMINAIRE

Jeudi 28 septembre 11h00

CEA Saclay, Orme des Merisiers Bât 709, p 220

RECONSTRUCTION OF THE PHYSICAL PROCESSES IN A
BINARY SYSTEM WITH A RADIO PULSAR FROM
MULTIWAVELENGTH (RADIO TO TEV) DATA

CHERNYAKOVA Masha

ISDC - Genève

In my talk I will discuss the general properties of the binary system with a radio pulsar, and stop in particular on two very peculiar sources PSR B1259-63, and LSI +61 303. For these two sources I will review the available radio to TeV data, and will try to interpret them in the frame of the most simple model, in which the radio and X-ray photons are a result of the synchrotron emission and IC scattering of the same population of the relativistic electrons. I will also discuss the different possibilities of the origin of the TeV emission, and demonstrate that the proton loaded pulsar wind could be a good explanation of the observed spectral and timing properties of the systems.