Karlica Mile

Position: EMJD PhD student Period covered: 2014 - now



I Scientific Work

Development of numerical codes for solving the kinetic equation and calculation of non-thermal spectra with the special interest to GRB afterglow. In this past year we constructed the paradigm of "sponge" model which includes the influence of ejecta fragmentation on the form of GRB afterglow lightcurve.

II Conferences and educational activities

II a Conferences and Other External Scientific Work

- 2nd Cesar Lattes Meeting, Rio de Janeiro, Brazil, April 13-22, 2015
- Fourteenth Marcel Grossmann Meeting, Rome, Italy, July 12-18, 2015

<u>III. Service activities</u> [activities carried out in collaboration with ICRANet (e.g. teaching activities, conferences etc...) and outside ICRANet (teaching activities in your university etc...]

III a. Within ICRANet

- Talk at 2nd Cesar Lattes Meeting, Rio de Janeiro, Brazil, April 13-22, 2015 with the title: Synchrotron Radiation and GRB Perspective – A Short Review
- Talk at Fourteenth Marcel Grossmann Meeting, Rome, Italy, July 12-18, 2015 with the title: "Sponge Model" As The Hydrodynamical Background For GRB Afterglow Phase

III b. Outside ICRANet

IV. Other

2015 List of Publication

• Dumbović, M., Vršnak, B., Čalogović, J., Karlica, M. (2011). 'Cosmic ray modulation by solar wind disturbances'. Astronomy and astrophysics, 531, A91-1-A91-17.