



Study of the activity of relativ...

Science background

Work plan

Education Plan

statistical analysis of the whole set of observations. We plan that the applicant will be able to present the results of the proposed project in a number of refereed publications on an international journal (likely spanning a time lapse longer than that covered by the present grant). It is also foreseen that the applicant will give talks at conferences, as well as a couple of seminars/colloquia for the local community.

Education Plan

The applicant is expected to get familiar with the capabilities and the methods related to the newest radio interferometers. In particular, the latest version of the software used in the data analysis will be made available in order to create a valuable expertise, that can be sold in the quest of further positions. On the scientific side, the candidate should deepen the knowledge of the basic processes happening in the extended regions around the compact object. In particular the interaction between the relativistic plasma responsible of the radio emission and the ambient medium. For example, the volume filled by the relativistic plasma is the result of the work done to build that structure. If we consider the actual jet power from high-frequency and high resolution observation ad the instantaneous energy output, we can derive an estimate of the duration of activity. There are a number of caveats to this picture, that can be worked out by the candidate.

