Dear all,

we are organising a workshop at ASTRON on

"Energetics and life-cycles of radio sources"

26-28 March 2018

Because of your work in this exciting field, we hope you will be interested in attending and contributing to this workshop. If you are planning on participating, please send a mail to morganti@astron.nl to keep your name on the mailing list for future announcements.

SCIENTIFIC RATIONALE

The nuclear activity is known to be recurrent on different time scales. The study of this duty-cycle is a topic that has recently attracted a lot of attention. The combination of new ideas about the cycle of activity and a more detailed view of the energetics can provide the required crucial input for testing models of AGN feedback. Radio galaxies and their radio jets have been found to affect the surrounding medium over different physical scales and, thus to play an important feedback role. Their actual impact depends on their duty-cycle and energetics, both still topics of discussion. The data coming from the new radio and optical facilities as well as progress in the numerical models are opening new exciting possibilities, making the workshop very timely.

The topics we would like to discuss are:

- duty-cycle of radio galaxies;
- duty-cycle and accretion mode;
- structure and impact of jets;
- radio-quiet and weak radio sources;
- energetics of jets;
- jet-environment interaction.

FORMAT

The workshop will start Monday morning and finish on Wednesday afternoon. We plan to have a reception in the afternoon of Sunday 25th March. We foresee a relatively small workshop (about 50 participants) that will be held in the auditorium at ASTRON. Information about registration, abstract submission, logistics, hotel etc. will be available in the coming weeks.

ORGANIZATION SOC: Raffaella Morganti (chair), Stas Shabala, Geoff Bicknell, Judith Croston,

Clive Tadhunter

LOC: Raffaella Morganti, Marisa Brienza, Joe Callingham, Jeremy Harwood, Liesbet Elpenhof