RadioNet support for training events
Application form

EVENT INFORMATION	
TITLE	HIGH RESOLUTION SURVEYING WITH INTERNATIONAL LOFAR
PLACE	LORENTZ CENTER, LEIDEN, THE NETHERLANDS
ORGANISER'S INSTITUTE NAME	UNIVERSITY OF OXFORD / Leah Morabito (LEAH.MORABITO@PHYSICS.OX.AC.UK) UNIVERSITY OF MANCHESTER / NEAL JACKSON (NEAL.JACKSON@MANCHESTER.AC.UK)
DATE	19 – 23 MARCH 2018
NO. OF PARTICIPANTS	25
TOTAL EVENT COST	EUR 20,320 (INCLUDES 25X HOTEL, TRAVEL, LUNCH, AND WORKSHOP DINNER)
OTHER SOURCES OF FUNDING	ERC Grant (PI: Rottgering): EUR 2,900 ASTRON: EUR 1,000 (to be used for minority participants) BALTICS: EUR 1,450 (for those from Latvia only)

REQUEST	
Requested contribution	EUR 2,000
Use of the RadioNet contribution	This will support the travel and accommodation costs for 3 to 4 PhD students or early-career postdocs (in that order of precedence) who wish to attend this workshop, who might otherwise not be able to attend. This number is based on the registered and invited participants. The final costs may vary slightly depending on availability, and the funding would be reimbursed only for costs actually accrued based on presentation of receipts to the Lorentz Center / RadioNet. By enabling early-career scientists to come to this workshop, we will directly help the RadioNet goal of promoting and strengthening the RadioNet infrastructures associated with LOFAR, and encourage networking amongst participants from all across Europe. It is critically important that we begin training early-career scientists to maintain a network of experts who are skilled in high-resolution imaging with LOFAR, as this will be one of the key focusses of the observatory going forward.
Impact of training	The aim of this workshop is to bring together experts and interested radio astronomers to (a) learn how to produce high resolution images with the Low Frequency Array (LOFAR) and (b) to discuss and finalize the details for implementing a pipeline to do this on a large scale to post-process already existing observations. High-resolution imaging with LOFAR requires the use of special techniques that are incorporated in a pipeline developed by the LOFAR Long Baseline Working Group. This workshop will bring together experts novices from within the Long Baseline Working Group and the wider LOFAR community. During this week we will provide tutorials for participants and conduct discussions on how to implement the specialized pipeline to post-process data on a large scale for the LOFAR Two-Metre Sky Survey, which will cover the entire Northern sky. The anticipated impact of the event is two-fold: 1. We will begin by training users to use the newly developed International-LOFAR pipeline to produce the highest resolution images possible at 120 MHz. This will allow the pipeline developers to communicate their knowledge and expertise to a new generation of International-LOFAR users, and gather feedback on the pipeline

		implementation. The impacts will directly be: an increase in knowledge in the community, and the necessary feedback to improve the pipeline and/or publicly available documentation. 2. By gathering experts and newly trained users together, we will discuss issues for implementing the pipeline on a large scale to post-process the LOFAR Two-Metre Sky Survey (LoTSS; Shimwell et al. 2017) at sub-arcsecond resolution. The impact will be the identification of issues to be resolved for large-scale implementation of the pipeline (including logistical issues such as computing infrastructure), and an outline of the work necessary to resolve this issues (along with a list of those responsible for the work). Overall, the impact will be an increase in knowledge of high-resolution imaging with LOFAR, and a step forward for the Radio Observatory in terms of processing capability by using the finalised pipeline. This will also impact the LOFAR Surveys Key Science Project, which has over 200 members spread throughout many RadioNet participating countries and organisations. It will also raise visibility of RadioNet to participants, many of whom are either already involved in RadioNet projects or are strong candidates to be involved in the future.
	Accessibility	This workshop is limited in number of spaces only; there is no criteria imposed for participants to register. We particularly encouraged participants from minority groups and from PhD/early-career stages. The only scheduling conflict with other RadioNet events is for the *RadioNet Board and Advisory Group f2f* on 20 March, but we do not anticipate that the participants will wish to attend both meetings.
	Ethics	We have tried to balance the gender ratio as much as possible amongst the speakers, and the funding from ASTRON for minority participants has been advertised.