

RadioNet support for **organisers** of technical events

Application form

EVENT INFORMATION	
EVENT TITLE	Phased Array Feed Workshop
EVENT PLACE	<i>Physikzentrum Bad Honnef, Germany</i>
ORGANISER'S INSTITUTE	<i>Max-Planck-Institut für Radioastronomie, Gundolf Wieching, wieching@mpifr-bonn.mpg.de</i>
EVENT DATE	16.09.2019- 18.09.2010
NO. OF PARTICIPANTS	40-50
TOTAL EVENT COST	approx. 7200EUR
OTHER SOURCES OF FUNDING	<i>none</i>
REQUEST <i>(max. 2,5 pages)</i>	
Requested contribution [EURO]	<i>5000EUR</i>
Use of the RadioNet contribution	<i>The requested contribution will cover the expenses for the venue, incl. technical support (Beamer etc.) and child care support for the participants. Small price for the best poster.</i>
Topic	<p><i>Building upon the first "Phased Array Feed (PAF) Workshop", this workshop provides a platform to exchange engineering results within the scope of PAF developments, such as:</i></p> <ul style="list-style-type: none"> <i>• engineering feedback from commissioning and early science observations;</i> <i>• element and array design with ultra-wide bandwidth;</i> <i>• analogue and mixed-signal electronics;</i> <i>• traditional beamforming and innovative solutions;</i> <i>• beamformer calibration;</i> <i>• array characterization and testing;</i> <i>• sensitivity and field of view limits;</i> <i>• cryogenic PAFs;</i> <i>• systems integration;</i> <i>• telescope optics for PAFs;</i> <i>• imaging, and lessons learned from early PAF deployments;</i>
Relevance for RadioNet	<i>Astronomical PAF receivers are a new generation of astronomical receivers, which significantly may increase the reception area of telescopes. This type of receiver therefore is especially interesting for already existing European telescopes and the</i>

	<p>increasing Radio Frequency Interference (RFI) environment, in order to make them even more competitive, especially in the era of upcoming new telescopes at RFI protected sites outside of Europe. However, this technology requires significant technological developments. This workshop will bring the RadioNet beneficiaries together to disseminate technical achievements on PAF developments. In addition, experts from institutes outside the European radio astronomy will participate in order to exchange the engineering results as well as ideas and directions for development. The wide range of topics related with the PAF developments allows to attract specific industry in the field of e.g. low noise analogue signal.</p>
<p>Impact</p>	<p>As already stated above, the astronomical PAF receivers are a new generation of astronomical instruments. This workshop on the one hand will help to disseminate the corresponding results of our activities within the RadioNet Joint Research Activities. On the other hand, especially the participation of industry who also develop and produce PAFs for a wide range of use, and institutes outside the RadioNet consortium, will serve to exchange best practice and help to overcome unresolved challenges.</p>
<p>Ethics</p>	<p>One of the key foci of RadioNet and its participating institutions always has been to educate, train and build up the next generation of astronomers, astrophysicists, engineers and technicians. Furthermore, we also aim at raising the female quota in our field. Therefore, respecting the "Charter of Diversity" of the RadioNet consortium, the organisers will encourage young scientists and engineers to take part and to present their work at the workshop (poster session / price for the best poster). All participating institutions will particularly encourage their female co-workers to join the workshop. In order to allow for the participation of young parents, the local organisers will provide child care for the workshop participants, if needed.</p>

Privacy Policy: With signing this template and applying for RadioNet funding, I accept the Privacy Policy of RadioNet, which is based on the EU General Data Protection Regulation (GDPR).

Place & Date:

Bonn 31. JAN. 2019

Signature of the applicant:

