

# RadioNet support for scientific events

## Application form for organisers

EVENT INFORMATION	
TITLE	ALMA2019: science results and cross-facility synergies
PLACE	Cagliari (Italy) <a href="http://www.eso.org/sci/meetings/2019.html">http://www.eso.org/sci/meetings/2019.html</a>
ORGANISER'S INSTITUTE NAME	INAF-Osservatorio astronomico di Cagliari (INAF-OACa) in collaboration with ESO, NRAO, NAOJ and the Joint ALMA Observatory Silvia Leurini, <a href="mailto:silvia.leurini@inaf.it">silvia.leurini@inaf.it</a>
DATE	14/18 October 2019
NO. OF PARTICIPANTS	200
TOTAL EVENT COST	85000 eur
RADIO.NET SUPPORT	3000 eur
OTHER SOURCES OF FUNDING	70000 eur from fees (which will cover coffee breaks and lunches, social dinner, social event to the Sardinia Radio Telescope ) 5000 eur from ESO, funding request of 8000 eur to INAF
REQUEST (max. 2 pages)	
Short abstract of the event	<p>ALMA has a tradition to organise very successful science conferences that bring together the full community. Since the beginning of ALMA Operations, these conferences have been very productive and instrumental in discussing the new science results coming from ALMA, the emerging priorities from the user community on science operations and capabilities, and the long term upgrade goals. The first conference in this series was organised in Puerto Varas (Chile, 2012), the second in Tokyo (Japan, 2014), the third in Indian Wells (USA, 2016). INAF-OACa joined ESO in leading the organisation of this fourth conference which will be held in Cagliari (Italy) in October 2019. Radionet has regularly co-sponsored the ALMA science conferences, providing a key contribution to allow presentations of results and discussions of followup using the Radionet infrastructures.</p> <p>ALMA has passed the milestone of 1000 published scientific results in April 2018, these results are mostly based on five years of science operations. Since Cycle 4 (programmes executed since ~2017) ALMA has been dedicating significant amount of time to the execution of Large Programmes, as well as Solar and mmVLBI. The ALMA conference in Cagliari will be the first ALMA Science conference where we expect significant results from these type of programmes. The mmVLBI results from the Event Horizon Telescope experiment and the physics of the supermassive black hole in the Galactic centre will be one of the main focuses of the meeting. The inclusion of Solar results will result in an expansion of the community. The results from Large Programs will prominently feature the combination of observations from ALMA and other facilities, in particular, but not limited to, NOEMA and APEX.</p> <p>From the scientific perspective, an ALMA Science Conference in 2019 is timely for several reasons: the new science coming from Solar and mmVLBI observations, and the first set of Large Programmes (6 in total) will have been completed and the data fully delivered to the user by the end of 2018, making a late 2019 date perfect to discuss the results and followups of these programmes, as well as their followup with other facilities.</p>

Relevance for RadioNet	<p>Traditionally, the ALMA conferences cover the full breath of ALMA Science. We plan to continue with this tradition, but we aim on evolving the scope to connect more directly the ALMA scientific community with complementary facilities. Rather than having “facility” talks, as done in some previous incarnation of the ALMA conferences, we favour the option of promoting talks that highlight cross-facility scientific results (both among the invited and contributed parts of the programme), and highlight the scientific cases for future facilities (e.g. SKA and CTA) as they emerge from current research carried out with ALMA. With this goal in mind, the ALMA Science Conference in 2019 is extremely timely for the Event Horizon Telescope and Global mm-VLBI Array, which includes several RadioNet infrastructures (NOEMA, IRAM-30m, Effelsberg, APEX) operating at 3mm and 1mm. Particular focus will be given to scientific results achieved using ALMA VLBI projects in Bands 3 and 6, which were allocated from cycle 5 (2017) on and whose results are starting to be published. Although the list of invited speaker is not yet finalised, we foresee at least one invited talk to report on the Event Horizon Telescope experiment observations of SgrA* and M87 performed in 2018, and we expect more contributed talks on the Global mm-VLBI. Another goal of the conference is to present the ALMA Large Projects to the community and this will emphasise the synergy between ALMA and other (RadioNet) facilities. Examples of such synergies are presented by the PHANGS, ALMA-IMF, FAUST, and ATOMIUM large projects.</p> <p>In addition, complementary data from NOEMA and APEX (as well as other Radionet facilities, such as eMERLIN) will be discussed as part of the scientific results or followup programmes.</p> <p>Future development of the science capabilities of ALMA, Radionet facilities and the mmVLBI network will all be discussed at the meeting.</p>
Impact on RadioNet	<p>Science from Radionet facilities will have a broad exposure at the meeting, which will include broad participation worldwide, as in previous editions, promoting the science enabled by the Radionet program.</p>
Use of the RadioNet contribution	<p>RadioNet support will be used</p> <ol style="list-style-type: none"> <li>1) for the travel and fee expenses of individual Radionet-eligible participants;</li> <li>2) for child care costs, if requested by Radionet-eligible participants to attend the meeting;</li> </ol> <p>We will support the participation to the meeting of users of Radionet facilities that will present result from Radionet facilities, either in isolation or in combination with ALMA, as well as those presenting future upgrades of the Radionet facilities and the results of the Radionet JRAs, many of which are also relevant for the long term upgrade of ALMA. Beneficiaries will be selected by the Local Organizing Committee (S. Casu, S. Leurini, T. Coiana, S. Poppi, G.L. Deiana, D. Kleiner from INAF-OACa; L. Testi, F.Kemper, E. Zuffanelli from ESO)</p>
Ethics	<p>The organizers will endeavor to achieve gender balance and other ethnic issues in all aspects of the conference. This balance will be achieved through equitable female and male representation on the science organizing committee and as session chairs, as well as through invitations to high quality oral and poster presenters of both sexes in line with the gender balance in our research community. Indeed, the Scientific Organizing Committee and the Local Organizing Committee were already selected to be gender balanced (and also region balanced for the SOC) and a great effort will be given to balance seniority, gender and region of the conference chairs and speakers in the final program, and of the individuals selected for financial support. High-quality child care services will be offered during the conference.</p> <p>The ESO code of conduct for the organisation of scientific workshops and meetings will apply to this meeting (<a href="https://www.eso.org/sci/meetings/2018/tcl2018/code.html">https://www.eso.org/sci/meetings/2018/tcl2018/code.html</a>)</p>

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Place & Date:

Cagliari, 1/02/2019

Signature of the applicant:

