



## RadioNet support for training events

### Application form

---

EVENT INFORMATION	
TITLE	ASTA - Advanced Software Tools for ALMA
PLACE	Chalmers University of Technology, Gothenburg, Sweden
ORGANISER	Nordic ARC node (contact: Matthias Maercker)
DATE	November 2017
NO. OF PARTICIPANTS	30
TOTAL EVENT COST	5500 EUR
OTHER SOURCES OF FUNDING	Onsala Space Observatory
<b>REQUEST</b> <i>(max. 2 pages)</i>	
Requested contribution	4200 EUR
Use of the RadioNet contribution	The RadioNet contribution is to cover travel and accommodation costs of invited speakers in the expert areas covered in the event. Other costs are the rent for the meeting room (1300 EUR), which will be covered by the Nordic ARC node and Onsala Space Observatory. The training event will contribute to the development of advanced tools and the next generation software by bringing together the expertise in this area, and coordinating development efforts for advanced software development, especially for ALMA.
Impact of training	<p>ALMA is moving into full operation and is now continuously delivering high-quality science data to the community. The complexity of the data (i.e. interferometric visibilities, large spectral cubes) and of science analysis requires new software tools to be developed.</p> <p>The event will bring together the people working on software development at the European ALMA nodes to present existing tools and discuss the strategy and need for future software. The event will be organised around seven invited key speakers covering the expertise areas in software development within the European ARC node network. In addition, there will be contributed talks from developers within the nodes. Finally, the talks will be followed by moderated discussion sessions to a) discuss the existing tools, b) coordinate the development throughout the ARC nodes network, and c) identify the needs for future tools. Members of the nodes are invited to attend and to participate in the discussions, hence ensuring that the knowledge distributed across the node network is transferred between node members. The meeting is planned to cover three days, allowing for sufficient time to give presentations and in-depth discussions.</p> <p>The goals of the workshop are to enhance communication between the European software developers and users (ARC node staff, CASA developers, user support staff), coordinate software development efforts and strengthen network collaboration, and identify the required future software tools.</p> <p>The event will cover all the areas that European ALMA software developers are active in: (re-)calibration of data (e.g. array combination, spectral scans, self-</p>

	<p>calibration), data analysis (e.g. visibility or image fitting, source detection), archive mining, polarisation calibration, and solar observations. Suggested invited speakers and their fields of expertise are: Sandra Burkutean (Italian ARC node, array combination), Marcella Massardi (Italian ARC node, archive re-imaging project), Dirk Petry (ESO ARC, CASA development), Felix Stoeher (ESO ARC, ALMA archive), Sven Wedemeyer (Univ. Oslo, solar observations), Thomas Möller (German ARC node, spectral line tools), Kirsten Kraiberg Knudsen (Nordic ARC node, UV-stacking).</p> <p>The impact of the meeting will not only lead to an increase of knowledge and efficiency in software development between the ARC node members, but also to a higher level support for users of modern interferometry arrays, in particular ALMA. The expertise acquired and communicated during the event will lead to a more evenly distribution of knowledge, which will be of direct benefit to European radio astronomers.</p>
Accessibility	<p>The meeting will primarily be announced within the European ARC node network. In addition to the invited speakers, node members will be encouraged to submit contributed talks. To guarantee efficient discussions, the number of attendees is limited to approx. 30. ARC node members will be given priority when registering. If places are available, members of the European user community, or from outside the European ARC Nodes network (e.g. from the North American or East Asian ARCs), may attend.</p>
Ethics	<p>We have established a gender balance in the invited speakers. Contributed talks will be selected on subject, keeping gender and regional balance in mind. Due to the gender balance within the European ARC node network, and the distribution of the network throughout Europe, we expect to be able to reach this balance.</p>