

# RadioNet support for scientific events

## Application form

EVENT INFORMATION	
TITLE	REVISITING NARROW-LINE SEYFERT 1 GALAXIES AND THEIR PLACE IN THE UNIVERSE
PLACE	PADOVA, ITALY
ORGANISER'S INSTITUTE	UNIVERSITÀ DEGLI STUDI DI PADOVA, DIPARTIMENTO DI FISICA E ASTRONOMIA "G. GALILEI"
DATE	APRIL 10-13, 2018
NO. OF PARTICIPANTS	80-100
TOTAL EVENT COST	22 KEURO
OTHER SOURCES OF FUNDING	Conference fees (250€ standard fee, 150€ students)
REQUEST	
<i>(max 2 pages)</i>	
Requested contribution [EURO]	<i>Please specify the level of the requested RadioNet support [EURO]</i> 3000
Use of the RadioNet contribution	<i>Please specify in detail the use of the RadioNet support, indicating the expenses (e.g. who, how much, for what, selection criteria) and keep in mind the goal of RadioNet<sup>1</sup>.</i>  <i>The RadioNet contribution will be used to grant fee waivers and lodging support for 5 young researchers, which will be selected according to the scientific merit of their proposed contribution and to their possibility to access other fundings. Researchers coming from disadvantaged countries will have a preferential access to the grants. The use of RadioNet contribution for grants to young researchers will also allow the organizers to keep the conference fee as low as possible, increasing the overall participation and visibility of the workshop and, in turn, of RadioNet.</i>
How the event fits in the RadioNet framework	<i>Please specify the scientific impact of the event on the RadioNet community.</i>  <i>Narrow-line Seyfert 1 galaxies (NLS1s) originally presented a challenge to the AGN "unification" model. It is now widely agreed that NLS1s are extreme type 1 AGN, characterized by a very high accretion rate and low black hole mass. The detection of gamma-ray emission from some of them indicates the presence of a powerful relativistic jet pointing toward the Earth, further complicating interpretation of the NLS1 phenomenon. These jetted objects are strong radio-emitters, and their nature is still strongly debated. NLS1s indeed are a natural laboratory to test the unification of relativistic jets at all mass-scales and the basic physical processes that generate these poorly understood structure. The topic of NLS1s has been largely debated in the last few years, and particular attention was devoted to radio-loud NLS1s. In this sense, RadioNet facilities like MERLIN, EVN and IRAM, already contributed to the development of the research in this field (e.g. see Zuther et al. 2011, Gabanyu et al. 2014, Foschini et al. 2015, Angelakis et al. 2015, Caccianiga et al. 2017). Some of these works are crucial to actually characterize and understand the nature of these sources, and to reveal their role in galaxy evolution throughout cosmic time. Our workshop will face the many open issues in the NLS1s topic, allowing a constructive</i>

<sup>1</sup> For more info about the RadioNet scientific dissemination please contact – Dr. T. Venturi (tventuri@ira.inaf.it)

	<p><i>confrontation between many experts (80-100 participants expected) of all electromagnetic bands. The SOC already reflects this multiwavelength expertise, with both experts of low- and high-energies (Sonia Antón, Marco Berton, Luigi Foschini, Dragana Ilić, Preeti Kharb, Wolfram Kollatschny, Anne Lähteenmäki, Bradley M. Peterson, Luka Č. Popović, Piero Rafanelli, Eleonora Sani). Moreover, invited review talks by well known experts (tentatively Alessandro Caccianiga, Bozena Czerny, Akihiro Doi, Dirk Grupe, Stefanie Komossa, Smita Mathur, Richard Pogge) are planned, to provide a state-of-the-art overview of NLS1s properties. Finally, we intend to publish online proceedings after the conference.</i></p>
<p>Relevance of the event for RadioNet</p>	<p><i>RadioNet supports organization of scientific events focussing on scientific results achieved using the RadioNet facilities and/or technical developments of RadioNet activities; additionally cross-disciplinary events with the aim to feed the collaboration between radio astronomers and scientists working in other bands of the electromagnetic spectrum.</i></p> <p><i>In the light of this, please highlight the relevance of your event in the spirit of the RadioNet goals.</i></p> <p><i>The workshop will be largely dedicated to multiwavelength studies about NLS1s. Their basic classification indeed depends on optical spectra, but also X-ray and gamma-ray observations are crucial to understand their behavior. NLS1s shed light on many aspects of relativistic jets production, having a strong impact on basic physics as well. In this frame, the workshop will definitely increase the collaboration between radio experts and astronomers working in different frequencies. This has already proved to be true for the previous edition of this conference series, held in Milan 2011. One of the most significant products of that conference was published by Foschini et al. (2015), and put together a large collaboration of radio, optical, infrared, ultraviolet, X-rays and gamma-rays experts. Outreach activity: Radioastronomy is living a kind of gold era, with cornerstone telescopes being developed, some already in operation. It is the right time to involve the new generation that will take the most of these new radio facilities. In this framework we propose to deliver a special outreach session, in the format of a TED talk, adapted for a young (10-14 years old) audience, given by young researchers, on radioastronomy matters connected with the subject on galaxies hosting SMBH.</i></p>
<p>Ethics</p>	<p><i>Please specify how you will address the ethic issues (e.g. gender, ethnic)</i></p> <p><i>Our workshop will be organized paying attention to both gender and ethnic balance. Both the SOC and the LOC are already balanced, and the same attention was devoted to the selection of the invited speakers. We also intend to devote a 1-hour session of the workshop on Gender Equity Issues in Astronomy. Although some steps forward have been made in the last years – in the conference “Quasars at all cosmic epochs”, also hosted in Padova in 2017 April and sharing part of SOC and LOC with the present workshop, 55% of the talks were given by female speakers – a critical discussion about the current situation of women in Astronomy and in Science in general can be important to draw more attention to this still sensitive topic.</i></p>