RadioNet support for scientific events
Application form for organisers

EVENT INFORMATION	
TITLE	Young European Radio Astronomers Conference 2019 (YERAC 2019)
PLACE	Dublin Institute for Advanced Studies (DIAS)
ORGANISER'S INSTITUTE NAME	Dublin Institute for Advanced Studies: Tom Ray - tr@cp.dias.ie, Simon Purser - purser@cp.dias.ie, Eoin Carley - eoin.carley@dias.ie
DATE	26th - 29th August 2019
NO. OF PARTICIPANTS	30
TOTAL EVENT COST	€15430
RADIONET SUPPORT	€13430
OTHER SOURCES OF FUNDING	We intend to apply for funding from Science Foundation Ireland (national science funding agency) and Failte Ireland (the national tourism board). Financial support from DIAS amounting to €2000 has been discussed and is anticipated pending final confirmation.

REQUEST *(max. 2 pages)*

Short abstract of the event	For 50 years, the Young European Radio Astronomer Conference (YERAC) has been a forum for undergraduate, graduate and young post-doctoral students in radio astronomy to meet and present their work. DIAS will continue this mission into 2019 whereby 30 early-career radio astronomers will be given the chance to showcase their most recent results over the course of 3 days and, in so doing, develop their own research networks. Participants will also be granted the chance to visit the Irish LOFAR site at Birr Castle which forms an important component of the RadioNet-affiliated International LOFAR Telescope. In this venture the future of radio astronomy in Europe will be supported by giving the next generation of radio astronomers the skills, and confidence, for their future careers within the European radio astronomy community. As with previous YERACs, our goals and mission statement are firmly inline with those of RadioNet and contribute to its goals, networking activities and fostering of a sustainable research environment.
Relevance for RadioNet	Since 1968, YERAC has provided an annual forum for early-career radio astronomers to present their current work to their fellow peers. Disseminating their research formally at this event has provided them with invaluable experience of presenting their findings to a specialist audience, in turn preparing these students to take up the mantle as the next generation of European radio astronomers. Collectively, works presented at YERAC have encompassed all frontiers of astrophysical research from solar physics to studies of active galactic nuclei. Due to the broad range of technical requirements across these subjects, the use of cutting-edge, RadioNet-affiliated facilities such as e-MERLIN, LOFAR and eVLBI have been paramount. Naturally these facilities' contributions to astrophysical advancements will be actively selected, and therefore well represented, at YERAC 2019 forming the core of the science presented at the conference. Given that RadioNet's mission includes providing comprehensive networking opportunities for astronomers and students, YERAC's purpose fits squarely into one of the primary goals of RadioNet's mission. By promoting the work of the next generation of professional astronomers and astrophysicists in this capacity, YERAC will aid in fostering a sustainable research environment in the future. Discussion of cutting edge RadioNet facilities, particularly the SKA, will form part of the programme by both invited speakers

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	and students from SKA-member states. Furthermore, Ireland is a LOFAR member with its own station (known as I-LOFAR) and national consortium, lead by Trinity College Dublin (TCD). Holding the meeting at TCD will provide students with an opportunity to meet the I-LOFAR scientists and engineers and provide a possibility to work with this team on any personal radio astronomy project in which a LOFAR station may be of use. Providing researchers with access and training on world-class facilities such as LOFAR is relevant to the official mission statement of RadioNet
Impact on RadioNet	**Advertisement of the RadioNet project to young astronomers and therefore increase RadioNet's representation, influence and presence in future research.** Hosting the YERAC conference will provide an opportunity to advertise the RadioNet project to young radio astronomers and early career researchers and therefore increase RadioNet's representation, influence and presence in the future research of these scientists. RadioNet's mission and contribution to the YERAC conference will be highlighted during the 2.5 days of talks, giving the young researchers a full appreciation of the importance of RadioNet for the support and development of European radio astronomy at all levels, from supporting the development of large-scale radio astronomy facilities and projects to providing opportunities to researchers of all levels to network. This will have an impact on the future collaborations and working relationships of the next generation of radio astronomers. **Awareness of the development of radio astronomy in Ireland and throughout Europe in general.** Hosting the conference in Ireland will allow us to spread awareness amongst the early career researchers of the new developments of low frequency radio astronomy in Ireland, particularly highlighting Ireland's recent involvement in LOFAR. With a visit to the Irish Low Frequency Array (I-LOFAR) at Birr Castle, Co. Offaly, we can showcase the development of this instrument both locally and across Europe. Given the developments of instruments such as LOFAR and SKA, an awareness of the ongoing developments of phased array technology is essential for the radio astronomy researchers of the near future and will have an impact on their future career choices in fields related to these instruments. Related to this, Birr Castle is also rich in its astronomical heritage and was home to the largest telescope in the world during the mid-19th century. Known as the Leviathan and built by the 3rd Earl of Rosse, this telescope was responsible for the discovery of the spiral arms of galaxies and also the naming of the Crab Nebula. During the tour of the I-LOFAR site, we intend for Prof. Peter Gallagher to give a talk on the history of astronomy at Birr Castle and the ongoing developments in modern radio astronomy at the LOFAR site. This will be a great opportunity to learn about European and Irish astronomy, from recent history to the modern state-of-the-art. Ireland's involvement in radio astronomy has been rapid in recent years, with Ireland's recent accession to the RadioNet-affiliated European Southern Observatory (ESO) and the Atacama Large Millimeter Array (ALMA). Irish Minister for Innovation and Research has also recently undertaken an official visit the SKA headquarters, highlighting Ireland's interest in RadioNet-related projects at a political level. This will be opportunity to highlight ongoing and future developments in Irish radio astronomy at the highest level . **Facilitate networking opportunities amongst European radio astronomers and also those working further afield.** YERAC 2019 in Dublin will facilitate networking amongst young European radio astronomers and also radio astronomers from further afield. We hope to have contributions of young researchers from regions that do not normally have large participation in radio astronomy conferences, such as Africa. Advertisement of YERAC with Development in Africa with Radio Astronomy (DARA), will allow us to reach out to researchers and students in DARA-associated countries. Creating a global network will have a large impact on countries which are under-represented in this field and allow

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	young astronomers from these countries an opportunity to showcase their work and build stronger links with their European peers.
Use of the RadioNet contribution	We anticipate ~30 students and 4 invited speakers for a 2.5 day conference hosted by DIAS and held at TCD. On the final and third day there will be visit and tour of the Irish LOFAR station located at Birr Castle, Co. Offaly, Ireland (~150 km from Dublin). To facilitate this, we have request ~13,480 EUR, which accounts for the lodging and breakfast of the 30 students on the TCD campus (7650 EUR), room bookings at the School of Physics for 2.5 days (2260 EUR), expenses for the invited speakers (3000 EUR), and transport and tour of Birr castle (1000 EUR). The remaining expenses are for lunch provided to the students and tea/coffee during the talks. For the budget details please see the attached spreadsheet. Also, for RadioNet's convenience, we have activated a conference webpage at https://dias.ie/yerac2019/ (**username**: radionet; **password**: radionet) with details of the event and its schedule.
Ethics	YERAC 2019, as with those of previous years, supports both gender and racial equality (with advertise through DARA). With this in mind, we will be active in ensuring a balanced representation of identity across our participants. Specifically this means that these issues will play a defining part in our selection policy, in addition to the scientific contribution of each applicant.

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: 31 Fitzwilliam Place

Dublin

29/01/2019

Signature of the applicant:

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Number of attendees	30	
Number of days	3	
Item	**Unit Price (€)**	**Total (€)**
Conference Rooms		
School of Physics, TCD	-	2260
Hotels	**Unit Price (€)**	**Cost (€)**
TCD accommodation	85	7650
Catering	**Unit Price (€)**	**Cost (€)**
Tea/Coffee	5	450
Welcome reception	5	150
Badges	-	20
Subsistence	**Unit Price (€)**	**Cost (€)**
Lunch	10	900
Invited speakers	**Unit Price (€)**	**Cost (€)**
	750	3000
Birr Trip	**Unit Price (€)**	
Castle	15	450
Bus	-	550
Total (€)		**15430**
Cost per participant (€)		**514.33**