

# ECONOMIC DEVELOPMENT THROUGH RADIO ASTRONOMY WORKSHOP

10-14 June Goonhilly Earth Station, Cornwall, UK





#### PROF MELVIN HOARE — PRINCIPAL INVESTIGATOR

It is a pleasure to welcome you to the 'Economic Development through Radio Astronomy' workshop. This is being held as part of the series of workshops within the 'Development through Radio Astronomy Global Network' (DRAGN) project funded by the UK's GCRF scheme.





The workshop series consists of four international workshops throughout 2019, aiming to build partnerships between the various projects in development through radio astronomy that have already been established via the Newton Fund in Africa, Latin America and South East Asia. This collaboration will form a global network of expertise in the mobilization of radio astronomy for economic development. The network will establish and build 'south-south' connections that will help the sharing of experiences and lessons learned in how to translate the high tech skills of radio astronomy into local job creation and entrepreneurship. Other low- and middle-income countries (LMICs) in the three continental regions not currently involved will be encouraged to join the established activities and build strong regional collaborations around this theme. The workshops are fully funded by an award from the UK's Global Challenges Research Fund.





#### **PROGRAMME**

Monday					
Overviews					
09:30	Welcome / Introduction and Overview of Consortium of Universities for Goonhilly Astronomy	Melvin Hoare			
10:00	Overview of Goonhilly Earth Station Ltd	lan Jones			
10:30	10:30 Refreshment Break				
Co-location with Earth Station Sites					
11:00	Co-location in the AVN Programme	Carla Sharpe			
11:30	Geodetic Instruments	Roelf Botha			
12:00	SKA Commercialization Programme	Pontsho Maruping			
12:30	Lunch				
14:00	Satellite Communications	Ian Jones & Michael Woodward			
14:30	Tour of Sat Comms Dishes and Visitor Centre				
15:30	Refreshment Break				
16:00	Discussion on Co-location of Services	All			
17:00	Close				
	Tuesday				
	Satellite Applications				
09:30	Earth Observation	Dewald Lloyd			
10:00	South African National Space Agency	Eugene Avenant			
10:30	Refreshment Break				
	Innovation				
11:00	UKSA – Growing Space Business	Portia Bircher			
11:30	European Space Agency (ESA)	Donna Lyndsey			
12:00	Innovation Centre at Goonhilly	Sandra Rothwell + Mark Thompson			
12:30	Lunch				
14:00	Dual-use of Goonhilly-3 dish for Astronomy and Sat Comms	Mike Jones			
14:30	Tour of Goonhilly-3				
15:30	Refreshment Break				
16:00	DARA Business Development Programme	Steve Jones			
17:00	Close	I .			
27.00	Wednesday				
09:30	Science Centres	Julie Cleverdon			
10:00	Visitor Experience	Sandra Rothwell			
10:30	Refreshment Break				
11:00	Excursion				





## PROGRAMME (continued)

Thursday				
Satellite Projects				
09:30	Newquay Spaceport	Melissa Thorpe		
10:00	Goonhilly DSN Projects	lan Jones		
10:30	Refreshment Break			
11:00		Adriana Marais		
11:30	Business Incubators	Kat Hickey		
12:00	Lunch			
13:00	Tour of Goonhilly-6 DSN dish			
13:30	Guatemala Cubesat Project	Dan Alvarez		
14:00	Engage SKA and the Azores Earth Station Site	Domingos Barbosa		
14:30	European Regional Office of Astronomy for Development	Michelle Willebrands		
15:00		Santiago Vanegas		
15:30	Refreshment Break			
16:00	Discussion on Satellite Projects	All		
17:00	Close			
	Friday			
	Data Science	_		
09:30		Carla Sharpe		
10:00	Data Centres	Chris Roberts		
10:30	Refreshment Break			
11:00	The DOPPLER Project in Mozambique	Domingos Barbosa + Valerio Ribero		
11:30	Space Science and Radio Astronomy in UAE	Aquib Moin		
12:00	Women in Aerospace	Liz Seward		
12:30	Lunch			
14:00		Eugene Avenant		
14:30	BAE Satellite Projects	John Young		
15:00		Carla Sharpe		
15:30	Refreshment Break			
16:00	Discussion	All		
17:00	Close			



## **PARTICIPANTS**

\*In order of country and institute

Country*	Name	Institute*
Algeria	Nassim Seghouani	Centre de Recherche en Astronomie Astrophysique et Géophysique
Botswana	Mhlambululi Mafu	BIUST
Colombia	Santiago Vanegas	National University of Colombia
Ecuador	Jairo Armijos	Observatorio Astronómico Quito
Egypt	Esraa Abdel-Majeed Ali Khafagy	Cairo University
Ghana	Bernard Duah Asabere	GSSTI
Ghana	Dickson Adomako	GSSTI
Guatemala	Dan Álvarez	Universidad del Valle de Guatemala
Indonesia	Premana Premadi	Institut Teknologi Bandung
Iraq	Khudhair Assaf	University of Wasit
Ivory Coast	Obrou Kouadio Oliver	Université FHB Cocody
Kenya	George Omondi	Maseno University
Madagascar	Rakotonianina Solofoarisoa	IOGA
Mauritius	Nalini Heeralall-Issur	University of Mauritius
Mexico	Stan Kurtz	UNAM
Mozambique	Claudio Paulo	UEM
Namibia	Rhodri Evans	University of Namibia
Netherlands	Michelle Willebrands	European Regional Office of Astronomy Development
Nigeria	Chidi Akujor	Federal University of Technology
Peru	Jose K. Ishitsuka Iba	Campus Universitario de Santiago
Portugal	Domingos Barbosa	Instituto de Telecomunicações, Universitario de Santiago
Portugal	Valério Ribeiro	University of Aveiro
South Africa	Dewald Lloyd	Astroafrica
South Africa	Julie Cleverdon	Cape Town Science Centre
South Africa	Roelf Botha	HartRAO
South Africa	Eugene Avenant	SANSA
South Africa	Adriana Marais	SAP



## PARTICIPANTS (continued)

\*In order of country and institute

Country*	Name	Institute*
South Africa	Pontsho Maruping	SARAO
South Africa	Carla Sharpe	SARAO
UK	Elizabeth Seward	Airbus
UK	John Young	BAE
UK	Melissa Thorpe	Cornwall Development Company
UK	Steve Jones	DARA Business Consultant
UK	Kat Hickey	Goonhilly Earth Station
UK	lan Jones	Goonhilly Earth Station
UK	Sandra Rothwell	Rothwell
UK	Mark Birkinshaw	University of Bristol
UK	Donna Lyndsay	University of Exeter
UK	Mark Thompson	University of Hertfordshire
UK	Melvin Hoare	University of Leeds
UK	Mike Jones	University of Oxford
United Arab Emirates	Aquib Moin	United Arab Emirates University
Uruguay	Ricardo Rezano	Antel
Uruguay	Manuel Caldas	Ministro de Industria, Energía y Minería
Zambia	Mr John Chongo	Ministry of Education

