



Unlocking Amateur Radio Technology

Friday 12 April 2019 13:00

Protea Hotel Stellenbosch

Techno Avenue, Techno Park Stellenbosch

GPS Coordinates. 33° 57.958' S 018° 50.043' E

13:00 Registration

Opportunities to view display and interact with exhibitors Refreshments will be served

14:00 Welcoming

Nico van Rensburg ZS6QL

President South African Radio League

14:10 Keynote address:

Lindsey Magnus SKA

Lindsey is an expert on space weather. In his years at the Hermanus Magnetic Observatory, he was among many, responsible for the antenna system at Antarctica used for ionospheric research. Dr Lindsey Magnus is currently Head: Operations at the SKA .

14:40 Software Defined Radio

Johan le Roux ZS1RX

How to use a dongle, install the software and many interesting applications with practical step for step demonstrations.

15:10 The West Coast propagation phenomena

Nasri Gasant ZS1NAZ

The factors that drive Sporadic E propagation on VHF. The use of the Hepburn charts and other aids to predicts long distance VHF communication. The paper is supported by audio clips of actual long distance contacts.

15:40 Developing a VHF reverse beacon network

Brian Jacobs ZS6YZ

The Reverse Beacon Network has evolved to become a powerful tool with many Amateur Radio applications, mostly on the HF bands. The RBN concept also provides unique opportunities for real time propagation awareness on VHF and UHF. During his presentation Brian will demonstrate the concept with some practical examples

16:10 Refreshments

Visit the displays

16:30 F'Sati's latest satellite

Leon Steenkamp F'SATI

ZACUBE-2 , F'SATI's second satellite launched into space, many firsts were introduced into this 3U cubesat. A description and operating performance of the satellite will be given.

Exhibitors: (to date)

Comtest Distribution (Pty) Ltd, RF Design, F'SATI, GigaTechnologies

17:00 Deep space communication

Willie Koorts

Radio Astronomy in South Africa has its origins in Deep Space Station 5, originally built in 1961 as a tracking station for NASA's probes that were being sent to explore space beyond Earth orbit. Willie, co-author of the book "Sterre en Planete" is here to tell us how the modern deep space network, communicating with interplanetary probes, works.

17:30 Operating the first Amateur Radio Geostationary Satellite

Anton Janovsky ZR6AIC

How to set up a cost effective station, or simple use one of the many remote stations to operate DX 24/7 on Qatar Oscar 100

18:00 The Morningstar Remote Station

Allan Saul ZS1LS

For radio amateurs living in areas with restrictions on the erecting of antennas, the Morningstar remote station allows operate DX operation with a difference. Accessing the station from your QTH remotely, provides you with access to an HF antenna system as if it was standing in your own back yard.

18:30 Understanding WSPR and all the weak signals modes that culminated in FT8

Leon Lessing ZS6LMG

The story of Nobel Laurate Joe Taylor K1JT, WSPR and all the other modes that support weak signals communication which culminated in FT8, a mode that has taken the DX and VHF world by storm. A complicated digital technology simply explained and illustration getting you ready to take your amateur radio experience to a higher level.

19:00 Quick Fire presentations: (10 minutes each)

The All Africa Award

Tjerk Lammers ZS6P/ZS1J

SARL RF Noise floor monitoring project

Hans v d Groenendaal ZS6AKV

Young people are our future taking a new approach

Nico v Rensburg ZS6QL

19:30 Attendance prize draw

Followed by Snacks, refreshments and great conversations

21:00 Ends

Details of prizes

Nordic Thingy-52 Prototyping platforms

BBC micro:bits

AMSAT SA dual band Yagi

And more

