

First call and Invitation to attend the ESoA Summer School “Antennas for Radio Telescopes”

http://www.ee.sun.ac.za/esoa_art2016/

to be held at the University of Stellenbosch in beautiful Stellenbosch in South Africa in November 21-25, 2016

Organizers: Prof. Dirk de Villiers (ddv@sun.ac.za) and Dr. Albert Lysko (alysko@csir.co.za).

The School will provide a broad and detailed look at the specific challenges facing antenna designers and others working in radio astronomy applications. In addition to topics covering specific antenna technologies used in the state of the art instruments, background on basic radio astronomical methods and performance metrics will be provided, as well as an introduction to some basic calibration and imaging techniques. The School will provide participants with a solid understanding of what is required from the antenna systems to yield the best possible instruments for different applications.

The fee for participants from non-profit institutions is R7,000 (EUR440) for participants from South Africa (Europe), and double that for participants from for-profit companies.

Preliminary programme

Day 1: *Introduction to radio astronomy techniques and instruments* (Prof. David Davidson, Stellenbosch University, South Africa)

Day 2: *Reflector antennas in radio astronomy* (Dr. Peter Meincke, TICRA, Denmark)

Day 3: *Dense aperture arrays* (Prof. Marianna Ivashina and Dr. Rob Maaskant, Chalmers University of Technology, Sweden)

Day 4: *Sparse array antennas* (Prof. Christophe Craeye, University of Louvain, Belgium)

Day 5: *Calibration and system aspects* (Prof. Oleg Smirnov, Rhodes University, South Africa)

About Stellenbosch

Stellenbosch is a town in the Western Cape province of South Africa, situated about 53 km (33 mi) east of Cape Town via National Route N1. Stellenbosch is in a hilly region of the Cape Winelands, and is sheltered in a valley at an average elevation of 136 m (446 ft). It is the second oldest European settlement in the province, after Cape Town. Stellenbosch is in the heart of the Cape Winelands, the largest wine growing region in South Africa.

About Cape Town

The beautiful city of Cape Town is the tourist capital of South Africa with its exceptionally rich flora and fauna, and is famous for its harbour, for its natural setting in the Cape Floristic Region, as well as for such well-known landmarks as Table Mountain and Cape Point. In 2014, Cape Town was named the best place in the world to visit by both the American New York Times and the British Daily Telegraph.

About South Africa

South Africa, officially the Republic of South Africa, is the southernmost sovereign state in Africa. South Africa is the 25th-largest country in the world by land area, and with close to 53 million people, is the world's 24th-most populous nation. South Africa is a multi-ethnic society with its pluralistic makeup reflected in the constitution's recognition of 11 official languages, which is among the highest number of any country in the world. Its economy is one of the largest in Africa and the 34th-largest in the world. South Africa has also been a home to high technologies – hosting a half of the world's largest radio telescope “Square Kilometre Array” is an example, and is probably the only country in the world that developed 6 atomic bombs and willingly disarmed itself.

