



## **Titles and Abstracts – History2018.saa.ac.za**

**A Beesham** (UKZN)

**Email:** [abeesham@yahoo.com](mailto:abeesham@yahoo.com)

**Title:** Unizulu Science Centre and Astronomy

**Abstract:** The Science Centre of the University of Zululand has carried out (and is still carrying out) outreach and popularisation in astronomy for many years now. In this talk, the programmes of the Centre in astronomy are described. We also touch upon the possible introduction of astronomy as a discipline at the University of Zululand.

**D Buckley** (SAAO)

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**Title (provisional)** History of SALT/SAAO

**Daniel Cunnama** (SAAO)

**Email:** [Daniel@saa.ac.za](mailto:Daniel@saa.ac.za)

**Title:** Celebrating 200 years of the Cape Town Observatory

**Abstract:** I will outline SAAO's plans preparing for the 200th anniversary of the establishment of the Royal Observatory in Cape Town to be celebrated in 2020, and the role the broader community will play in this event.

**C de Coning** (ASSA Historical Section)

**Email:** [musca.crux@gmail.com](mailto:musca.crux@gmail.com)

**Title:** Prominent Amateur Astronomers of the Early Society

**Abstract (provisional):** A brief history of how the Astronomical Society came into being with emphasis on the personalities involved, most of whom were amateur astronomers.

**George Ellis** (UCT)

**Email:** [George.ellis@uct.ac.za](mailto:George.ellis@uct.ac.za)

**Title:** Cosmology in South Africa

**Abstract:** Cosmology has changed over the past 50 years from a mainly theoretical subject based in general relativity studies, to a data-rich subject due to many new kinds of telescopes and observational techniques, with a

corresponding change in emphasis in research. This talk will outline effects of those changes in the South African context.

**B Fanaroff** (SKA SA)

**Email:** [bfanaroff@ska.ac.za](mailto:bfanaroff@ska.ac.za)

**Title:** History of the SKA SA

**Abstract:** A survey of the history and efforts to write it up for publication

**MW Feast** (UCT)

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**Title:** The Radcliffe Observatory Pretoria, from Start to Finish

**Abstract:** The complexities involved in closing the Radcliffe Observatory, Oxford and setting up the (then) largest telescope in the southern hemisphere will be summarized.

This will be followed by an outline of the main early programmes and a selection of later projects by staff members and visitors. Finally, the reasons behind the closure of the observatory and the move of the telescope to SAAO, Sutherland will be briefly mentioned.

**IS Glass** (SAAO)

**Email:** [isg@sao.ac.za](mailto:isg@sao.ac.za)

**Title:** History of the Royal Observatory, Cape of Good Hope

**Abstract:** With the 200<sup>th</sup> anniversary of its foundation occurring in 2020 I will emphasize the significance of the RCoGH's contributions to astronomical history and heritage.

Starting as an almost purely utilitarian naval observatory it reached its zenith under David Gill as a technically innovative research institution. By the end of the 19<sup>th</sup> century it was widely admired and emulated.

During the 20<sup>th</sup> century the Royal Observatory slowly fell behind the times with a few honourable exceptions such as its work in the field of precision photometry. The small size of its telescopes, a deteriorating sky and political problems nearly ended its existence in the 1960s. However, it found a new life in 1972 as the headquarters of the SAAO.

**Keith Gottschalk**, *FBIS. Political Studies Department, University of the Western Cape. Founder member, South African Space Association. Cape Centre chair, ASSA 2005-2006.*

**Email:** [kgottschalk@uwc.ac.za](mailto:kgottschalk@uwc.ac.za)

**Title:** Astronomy, Space and Politics

**Abstract:** In South Africa, Astronomy and Space have as much linkages to politics as in other countries. These links increased dramatically after we became a democracy in 1994.

This paper starts with a historical overview, then analyses the linkages between Astronomy and the state. It also discusses the articulation between Astronomy, the other space sciences, astronautics, and politics. It concludes that these linkages ought to be nurtured.

**Jarita Holbrook** (UWC)

**Email:** [astroholbrook@gmail.com](mailto:astroholbrook@gmail.com)

**Title:**

**Abstract:** The South African Astronomy Oral History Project has the goal of video recording and archiving interviews with scientists. We will interview scientists at various career stages as long as they have a connection to South Africa in that they are South African, have lived and worked in South Africa, or are collaborators that have made scientific advances through South African partnerships. We aim to get a spread in ages, genders, and other social categories, not just the luminaries; in order to get a snapshot of the lived experiences of scientists as they navigate their careers. Details of their science are important, but we will include discussion of current debates and issues that are effecting astronomers today. This training is aimed at those interested in being interviewers for the project as well as those curious about being interviewed.

**Kechil Kirkham** Space Advisory Company, Centre for Astronomical Heritage

**Email:** [kechil@spaceadvisory.com](mailto:kechil@spaceadvisory.com)

**Title:** Engaging the general public in astronomical heritage - the bicentenary celebrations and a public exhibition

**Abstract (Provisional):** I make a presentation about an astronomy exhibition proposed for the bicentenary celebration and more generally about engaging the public with astronomical heritage matters.

**Lerothodi Leeuw** (UNISA)

**Email:** [lerothodi@gmail.com](mailto:lerothodi@gmail.com)

**Title:** Oral histories of individuals involved in astronomy in South Africa – progress and future plans.

**Abstract:** We will present a progress and future plans of an project on oral histories of individuals involved in astronomy in South Africa, lead by Prof Lerothodi Leeuw, UNISA, and Prof Jarita Holbrook, UWC. The project is to conduct, archive and showcase the recording of histories of individuals involved in astronomy in South Africa, and will mark one of the first initiatives

of the National Research Foundation Roadmap for the History of Astronomy in South Africa. In oral interviews of these individuals, the scientific practice, discovery and innovation of astronomy in South Africa will be recorded for analytical study and presentation in scholarly outputs and public presentations as well as archiving.

**Case Rijdsdijk** (President of ASSA, SAIP)

**Email:** [particles@mweb.co.za](mailto:particles@mweb.co.za)

**Title:** Outreach and publicity – history and current

Up to the 1990s the primary link between the public and astronomy was mainly through the planetaria in Cape Town and Johannesburg, with a sprinkling of the occasional open night at SAs Observatories. Media usually also the planetaria for information. There was a significant change in the middle 1990s when both HartRAO and the SAAO launched outreach and communication programmes. But it was the first Year of Science and Technology, YEAST, in SA that really provided the funding to initiate sustainable programmes at all major observatories with significant support from the amateur community. The identifying of an astronomer at observatories to liaise with the media also made a significant improvement in communication. The inclusion of astronomy into the school's curriculum also meant that teachers were becoming involved. With the bulk of SKA being in SA has meant that, in line with most Observatories round the world, education and communication is now an integral part of the budget of all Observatories.

**A Slotegraaf:** Centre for Astronomical Heritage (CFaH)

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**Title:** Archival Rescue: Lessons learnt at the Royal Observatory/SAAO

**Maciej Soltynski** (ASSA)

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**Title:** Gill and the RTC

**Abstract:** David Gill was Her Majesty's Astronomer at the [Cape of Good Hope](#) from 1879 to 1906. A brief biography and a list of his notable contributions to astronomy will be presented. In 1879 he proposed that a reversible transit circle (RTC) be built at the observatory to accurately measure the right ascension and declination of stars, but it was 20 years before his project received approval from the Admiralty, and the RTC finally became operational in 1905. The design and construction of the RTC will be discussed, showing Gill's amazing passion for detail as he strove to reduce all possible errors of measurement to the absolute minimum, making it by far the most advanced telescope of its type for a number of decades.

**Kurt Van Der Heyden** (UCT)

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**Title:** The NASSP and HCD in South Africa

**Abstract:** South Africa faces the exciting challenge of preparing a new generation of scientists to use the international astronomy facilities which are now available (the Southern African Large Telescope - SALT - in South Africa and the High Energy Stereoscopic System - HESS - in Namibia - the Karoo Array Telescope - MeerKAT) and in future even the Square Kilometer Array - SKA - radio telescope.

I will describe how the astronomy community has responded to the challenge and will specifically focus of the rationale and achievements of the National Astrophysics and Space Science Programme (NASSP).

**Christo Venter** (Northwest University)

**Email:** Christo.Venter@nwu.ac.za

**Title:** The History of Gamma-ray Astronomy in South Africa

South African astronomers have been privileged to contribute to the revolution that took place in high-energy astrophysics during the last several years. Local experience in cosmic-ray air-shower experiments placed them in a unique position to make pertinent contributions to this exciting new branch of astroparticle physics. I will trace the history of South African involvement in Gamma-ray Astronomy by referring to the construction of the first local telescopes in the 1980s, our involvement in the H.E.S.S. experiment during the 1990s and 2000s until present, the formation of the SA-GAMMA Consortium, and our current and future involvement in the Cherenkov Telescope Array (CTA) Collaboration. I will also cover some fundamentals including gamma-ray production mechanisms, typical astrophysical source types, environments, complementarity of multi-wavelength observations, and outstanding questions in Gamma-ray astronomy.

## POSTER PAPERS

**Wayne Orchiston** (University of Southern Queensland, Toowoomba, Queensland 4350, Australia; wayne.orchiston@gmail.com)

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**Title:** R.T.A. Innes and the Cape appointment: the full story

In 1895 the Sydney-based Scottish-born amateur astronomer Robert Innes accepted a clerical post at the Cape Observatory. In a paper I published about Innes in *Publications of the Astronomical Society of Australia* in 2001 I mentioned in passing an incident that at the time split the Australian astronomical community, but I made no mention of this in my 2003 *MNASSA* paper about Innes. When I wrote these two papers I decided not to elaborate on this incident, but in his *Living Amongst the Stars at the Johannesburg*

*Observatory* (2006) Dirk Vermeulen exposes aspects of Innes' private life while at the Union Observatory, so I now feel free to provide details of the Sydney 'incident'. In brief, Innes was having an affair, and immediately before his departure for Cape Town he committed his wife to a psychiatric hospital so that his mistress could accompany him (and his sons) to South Africa.

In this paper I will draw on letters now in the Mitchell Library (Sydney) to detail this unhappy saga; the way in which it split the Australian astronomical community; and the final outcome, with Innes' wife eventually being released from the hospital and joining her husband in Cape Town.