

History Symposium 2018

SAAO, Cape Town, 7-8 March 2018



Presentations

D Buckley (SAAO)

A history of SALT

This rather personal account of the history of the SALT project will range from the initial ideas of developing a 4-m class telescope in Namibia and its eventual realization as a 10-m telescope in South Africa. I will discuss the initial efforts to motivate for the telescope and the attempts to raise support and find partners, eventually leading to the “green light” in 1999. The rest of talk will highlight the construction, commissioning and eventual steady-state transition of SALT into a state-of-the-art astronomical facility.

D Cunnama (SAAO)

Celebrating 200 years of the Cape Town Observatory

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)

Prominent Amateur Astronomers of the Early Society

A brief history of how the Astronomical Society came into being with emphasis on the personalities involved, most of whom were amateur astronomers.

G Ellis (UCT)

Cosmology in South Africa

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)

History of the SKA SA

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

MW Feast (UCT)

The Radcliffe Observatory Pretoria, from Start to Finish

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)

History of the Royal Observatory, Cape of Good Hope

With the 200th anniversary of its foundation occurring in 2020 I will emphasize the significance of the ROCoGH'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 19th century it was widely admired and emulated.

During the 20th 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.

K Gottschalk (UWC, South African Space Association)

Astronomy, Space and Politics

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.

M Hoffmann (UFS)

Planetariums in South Africa

TBD

K Kirkham (Space Advisory Company, Centre for Astronomical Heritage)

Engaging the general public in astronomical heritage – the bicentenary celebrations and a public exhibition

The history of astronomy is not everybody's area of interest, and yet the public often express amazement concerning South Africa's lengthy and illustrious track record in astronomy. Fuelling interest in the history of astronomy leads to consideration of the future, particularly if engendered from the point of view of astronomical data. This presentation will put forward ideas for an exhibition focusing on the history and future of astronomical data, preparing the way for the SKA and our involvement in analysing and visualising the phenomenal data output of this massive radio telescope. The exhibition is being partly funded by the Royal Astronomical Society and will form part of the bicentenary celebrations at the SAAO in 2020.

Willie Koorts (SAAO)

The 1882 Transit of Venus and its relics

Worldwide there are very few direct pieces of evidence/relics left of the 1874/1882 Transit of Venus expeditions that were dispatched all around the globe. In 1882 expeditions were sent to Wellington (American), Touws River (British), Durban (local, from the Royal Observatory) and Aberdeen Road (local, from the Royal Observatory). As far as was known, the only direct relic of a Transit of Venus expedition is two cement piers (with a beautiful hand-written inscription) in Touws River. During former research into all the sites back in early 2000, Fiona Hobson volunteered to inspect the coordinates of the Aberdeen Road site, but found nothing. In July 2014, the author had the opportunity to visit Fiona and see the site. A set of very well preserved piers as well as relics from small buildings were found some distance away. On closer investigation it was found that the use of a different coordinate system at the time can explain the offset. The piers were measured to be very closely north-south orientated and resemble the layout of the relics at Touws River quite closely, suggesting the discovery of the relics of a second Transit of Venus site in South Africa.

L Leeuw (Unisa)

J Holbrook (UWC)

Oral histories of individuals involved in astronomy in South Africa – progress and future plans

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.

Lucia Marchetti (UWC/UCT)

Hemelliggaam / The attempt to be here now

The Hemelliggaam project aims to portray in a novel and very intimate way the historical deep connection that exists between the South African people, the Land and the Sky. This 3-year project (2017-2020) is currently supported by the NRF “Roadmap for the History of Astronomy in South Africa” and by the Italian Ministry for Foreign Affairs and International Cooperation.

Hemelliggaam is not only portraying the present of the rural communities living in key areas of SA historical/astronomical interest and of the people involved in astronomy research in South Africa, but is also recording stories and map the sites of ancient indigenous communities that lived or traveled in these areas and that first started to wonder about the Southern Sky. This collection of testimonies will produce an on-line photo/video archive and a traveling exhibition that will lead the audience along a virtual path in space and time following the development of Astronomy in South Africa.

In my talk I will describe the development of the Hemelliggaam roject and its first outcomes, including its first public exhibition currently underway in Cape Town’s Company Gardens and at the Iziko South African Museum & Planetarium

C Rijdsdijk (President of ASSA, SAIP)

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)

Archival Rescue: Lessons learnt at the Royal Observatory/SAAO

Efforts undertaken to rescue valuable materials generated by individuals associated with the Royal Observatory, and later the SAAO, are described. The past and present condition of the Archive is sketched, solutions to problems encountered are presented, and practical advice on implementing basic archival practices is given.

M Soltynski (ASSA)

Gill and the RTC

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.

K Van Der Heyden (UCT)

The NASSP and HCD in South Africa

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).

D Van Jaarsveldt (Boyden Observatory)

One dream ignites another: A short history of the transformation of Lamont-Hussey Observatory

In this presentation the history and fate of the Lamont-Hussey Observatory in Bloemfontein will be explored from 1928 until 2013. The work of Alfred Rossiter to establish a world record for the most double stars measured, Earl Slipher's work of finally discovering the canals on Mars (!) and the work of Karl Henize will be discussed. This is followed by a time of "astronomy drought" leading to the closure of the observatory and use of the dome as a performing arts theatre. Finally the observatory gained new life when the building was transformed into a planetarium. The history therefore reflects the evolving of a dream into the creation of new dreams.

C Venter (NWU)

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.

Posters

W Orchiston (University of Southern Queensland)

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 MNASAA 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.

Workshop

J Holbrook (UWC)

L Leeuw (UNISA)

Oral History Project

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.

This provisional list was last updated on 25 February 2018.