Agenda
52nd Annual General Meeting of the South African Institute of Physics

Date: Friday, 6 July 2007
Time: 08h30 – 09h50
Venue: Great Hall, University of the Witwatersrand, Johannesburg

1. Opening And Welcome
2. Attendance
3. Matters for Discussion under “General”
4. Minutes Of Previous AGM (A51)
5. Matters Arising From The Minutes
   (a)
   (b)
   (c)
7. President’s Report For 2006 - 2007
10. Shaping The Future Of Physics In South Africa
    (a) SAIP Secretariat
    (b) Physics 500
11. Women in Physics in South Africa
12. Re-Writing the Constitution
13. Report from the Specialist Group Liaison on Council
14. Report from the Student Liaison on Council
15. Reports from Representatives on Other Bodies
    (a) SACNASP
    (b) NSTF
16. Conference Matters
    (a) Future Conferences
       i. 2008 - U. Limpopo (to be approved)
       ii. 2009 - U. KwaZulu-Natal (to be approved)
17. General
    (a) Approval of by-laws 2.2 and 7.2
    (b)
    (c)
    (d)
    (e)
18. Closure

J. Padayachee (Honorary Secretary)
Approval of by-laws 2.2 and 7.2

The following 2 changes to the by-laws were proposed by the Council of the SAIP. Members had until 30 April 2007 to lodge an objection to the proposed changes. Fewer than 10 objections were received, so the by-laws came into effect on 1 May 2007. The by-laws now have to be formally accepted at the 2007 AGM.

By-law 2.2.

Version before Amendment

A member whose fees for a particular financial year have not been received by 31st December following the expiry of that financial year shall cease to be a paid-up member.

Amended Version to be Approved at AGM

A member whose fees for a particular financial year have not been received by the expiry of that financial year (31 March) shall cease to be a paid-up member.

Reason for Change of by-law 2.2

To simplify the implementation of the termination of memberships, when members are in arrears, and to enable discounts to be effected for the annual conference.

By-law 7.2.

Version before Amendment

The award will be made for the outstanding achievement by a younger physicist in any of the following facets of any branch of physics: research, education, technology and industrial development. Awards will be made to persons who are less than 35 years old on the closing date for the receipt of nominations.

Amended Version to be Approved at AGM

The award will be made for the outstanding achievement by a young physicist in any of the following facets of any branch of physics: research, education, technology and industrial development. Awards will be made to persons who are 35 years of age or younger on the closing date for the receipt of nominations. Allowance for career interruptions may be made for a maximum of eight additional years.

Reason for Change of by-law 7.2

Council recognises that the original spirit of the Silver Jubilee Medal was to recognise the achievements of a young scientist. However, current career trends are more flexible than in the past, and more people are taking career breaks early in their careers. The proposed phrasing follows international trends and caters for breaks early in a career.
Minutes
51st Annual General Meeting of the South African Institute of Physics

Date: Friday, 7 July 2006
Time: 08h30
Venue: University of the Western Cape, Cape Town

1 Opening and Welcome

The President of the SAIP, Prof. H. Moraal, welcomed all to the University of the Western Cape. Prof. Moraal reported that Prof. F. Nabarro celebrated his 90th birthday earlier in the year and all are invited to sign a card for him, at the registration desk.

2 Attendance

The meeting was attended by 82 members and 30 non-members.
Apologies were received from S.H. Connell, A.R. Gxasheka, M.A. Hellberg, W.D. Heiss, M.E. Lee, C. Radue, E.E. van Dyk and F.J. Vorster.

3 Minutes Of Previous AGM (A50)

The minutes were accepted without amendment.

4 Matters Arising From The Minutes

There were no matters arising from the previous minutes that were not captured in the agenda items.

5 President’s Report For 2005 - 2006

The President-Elect, Prof. N. Chetty took over as chair and Prof. Moraal presented his report for the year 2005 - 2006.
The report was accepted without comment. Prof. Chetty then handed the chair back to Prof. Moraal.

Highlights of Report

Membership
Total membership numbers are almost constant, but the number of student members has increased by 360% since 2002.

50th Annual SAIP Conference
Prof. Moraal thanked Prof. J.B. Malherbe and his team at the Department of Physics in Pretoria for hosting the 50th Anniversary Conference. The Einstein theme for the day of plenary talks was especially successful.

International Year of Physics 2005
The Department of Science and Technology was thanked for funding the many International Year of Physics activities around the country in 2005.
Prof. E. Zingu, Mr. K. Govender, Mr. C. Rijsdijk and Ms. G. Stone were thanked for their efforts during IYP 2005.

FET Workshop
A workshop titled NCS and the Needs of Physical Science Teachers, organised by Prof. D. Grayson and Prof. M. Braun, was held at the Department of Physics, U. Pretoria on 6 and 7 October 2005. Representatives of Physics Departments, DST and the Department of Education attended the workshop. DST is using physics as an example to get other learned societies (mathematics, chemistry) to take responsibility for the training of teachers in their discipline.
Vote of Thanks

The President expressed his thanks to all members of Council, especially the President-Elect, Treasurer and Secretary, for their support over the last year.


The Treasurer, Prof. J. Engelbrecht tabled the audited statements for the financial year 1 April 2005 to 31 March 2006 (copy attached). He explained various aspects of the statements, notably that there were some members in arrears from 2003 and that the report on the 2005 SAIP Conference had not been received. The following amendments are noted:

1. Membership fees: Ordinary & Associate should read Membership fees: Ordinary, Associate, Student & Retired
2. Prizes: Astrophysics and Astronomy should read Prizes: Astrophysics and Space Science
3. Prizes: Specialist Group for Applied Physics should read Prizes: Applied and Industrial Physics
4. UNESCO contribution to CIMSTE Conference, Less: balance paid to CIMSTE should read UNESCO contribution to ICPE Conference, Less: balance paid to ICPE

The financial statements were accepted with thanks to Prof. Engelbrecht.

7 Budget for 2007 - 2008

The Treasurer, Prof. Engelbrecht presented his budget for the period 1 April 2007 to 31 March 2008 and expressed his thanks to Mrs. Engelbrecht for her help. The budget was accepted with thanks to Prof. Engelbrecht.

Table 1: Proposed Budget for the Financial Year ending 31 March 2008

<table>
<thead>
<tr>
<th>INCOME</th>
<th>R</th>
<th>EXPENDITURE</th>
<th>R</th>
</tr>
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<tbody>
<tr>
<td>Donations</td>
<td>100</td>
<td>Affiliation fees</td>
<td>500</td>
</tr>
<tr>
<td>Membership fees</td>
<td></td>
<td>Bank charges</td>
<td>1,500</td>
</tr>
<tr>
<td>Institutional members (3 X R 2 000)</td>
<td>4,000</td>
<td>Honoraria</td>
<td>8,000</td>
</tr>
<tr>
<td>Ordinary members (230 x R 280)</td>
<td>64,400</td>
<td>Overseas speaker</td>
<td>15,000</td>
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<tr>
<td>Associate members (15 x R 140)</td>
<td>2,100</td>
<td>Physics olympiad</td>
<td>3,000</td>
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<tr>
<td>Student/Retired members (155 x R 70)</td>
<td>10,850</td>
<td>Scifest</td>
<td>1,000</td>
</tr>
<tr>
<td>Subscribed Members (5xR50)</td>
<td>250</td>
<td>Secretary/Treasurer Expenses</td>
<td>3,500</td>
</tr>
<tr>
<td>Interest on SME account</td>
<td>20,000</td>
<td>Travel expenses (Council)</td>
<td>30,000</td>
</tr>
<tr>
<td>Conference surplus (UP + UWC)</td>
<td>72,000</td>
<td>Specialist group prizes</td>
<td>6,000</td>
</tr>
<tr>
<td>Sponsorships</td>
<td>1,000</td>
<td>Website + Postnet</td>
<td>1,500</td>
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<td></td>
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<td>Audit of Financial Statements</td>
<td>1,500</td>
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<td></td>
<td></td>
<td>Website Maintenance</td>
<td>3,000</td>
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<td>SAIP Office</td>
<td>100,000</td>
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<td></td>
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<td>Excess for year</td>
<td>200</td>
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<td></td>
<td>174,700</td>
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<td>174,700</td>
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8 Shaping The Future Of Physics In South Africa

Prof. Moraal reported that the Department of Science and Technology notified the President of the National Research Foundation on 15 March 2006 that R329 000 would be made available. The recommendations that received direct funding or explicit attention were:

1. Recommendation 3: Public Understanding of Physics, R 250 000.
2. Recommendation 4: Physics in Industry, R 79 000.
3. Recommendation 15: SAIP Office, funding will be ring-fenced for a period of 3 years, pending an SAIP plan to demonstrate sustainability after that.
4. Recommendation 5: Human Resource Development; it is recommended to National Research Foundation that dedicated funding will be ring-fenced for postgraduate students in Physics.

5. Recommendation 12: National Institute for Theoretical Physics; the letter mentions that this initiative is in the process of being funded.

9 Women in Physics in South Africa

Ms. M. Diale reported on the launch and activities of Women in Physics in South Africa (WiPiSA). The group was launched in 2005 and a Working group was elected:

<table>
<thead>
<tr>
<th>Chair</th>
<th>M. Diale</th>
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<tr>
<td>Secretary</td>
<td>S. Buchner</td>
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<td>Treasurer</td>
<td>J. Nel</td>
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<tr>
<td>Members</td>
<td>D. Grayson</td>
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<td>I. Gledhill</td>
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<td>N. Kgabi</td>
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<td>O. Kegopotsemang</td>
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<td>N. Mokoena</td>
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<td>P. Segonyane</td>
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<td>C. Cress</td>
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1. Prof. D. Grayson has been appointed as the SAIP Council representative.

2. Aims
   - To stimulate an interest in physics amongst girls and women
   - To encourage girls and women to study physics
   - To encourage and support girls and women to work in physics-related careers
   - To assist in removing or overcoming obstacles and barriers for girls and women to study physics and work in physics-related careers

3. Objectives
   - To attract girls into physics
   - To support women embarking on careers in physics
   - To promote women in physics leadership roles
   - To break stereotypes that discourage women from studying physics and working in physics-related careers
   - To support women in physics who need to balance family and career
   - To promote the creation of flexible jobs (not only full-time) that will allow women in physics who have families to follow meaningful career paths
   - To promote funding criteria that take into consideration women who have families (and may interrupt their career for a time)
   - To improve institutional structures and climate for women in physics
   - To challenge gender discrimination in selection procedures and the workplace

4. WiPiSA has received R300 000 from the Department of Science and Technology.

5. SAIP council is very supportive and the working group is appreciative for their advice and guidance.

6. Prof. Grayson has been appointed as the service provider for the Women in Physics Baseline Study.

7. There has been a call for proposals that further the aims of the Group. Details are available on the SAIP website.

Ms. Diale emphasized that the Group is open to men and thanked the Council for their help and support especially, Profs. Grayson and Engelbrecht.
10 Re-Writing the Constitution

Prof. Chetty explained that the SAIP, over the past five years, has gone through a transformational phase that has seen a number of constitutional changes to the organisation. Council has now decided that the constitution of the SAIP needs to be re-written because it is outdated. However, it is anticipated that the changes will not be fundamental. Some sections need to be deleted, some sections re-written, some entirely new sections developed and the general presentation and format improved.

Council has set up a Constitutional Committee consisting of Prof. Chetty (convener), Prof. M. Hellberg and Miss. J. Padayachee. In addition, the SAIP intends inviting about 25 key physicists from the physics community to serve on a Constitutional Reference Group. The committee aims to discuss the document with the reference group before finalising details. The reference group will ensure that a larger number of people are involved in the process of drawing up the document.

Ms. A. Strode, a Constitutional Law expert at the University of KwaZulu-Natal, has agreed to assist.

The aim is to circulate the document via e-mail before the document is presented to the 2007 AGM for consideration. Following the guidelines of the current constitution, the new constitution will then be put to the membership of the SAIP for adoption.

Prof. Chetty invited members to submit to him (chettn@ukzn.ac.za) names of people who might serve on the reference group as well as suggestions for what aspects of the constitution needed to be examined.

11 Reports from the Specialist Groups

Dr. E. Rohwer, Specialist Group Liaison presented the report to the AGM on behalf of the Specialist Groups. More information about the activities of the Specialist Groups can be obtained from the websites of the Groups, accessible from the SAIP web site.

11.1 Applied and Industrial Physics

A new committee was elected through an electronic election process before the conference. The Specialist Group is still in the process of transformation. AIP members will be consulted to help produce group guidelines and direction. At the group meeting the committee was asked to formulate a response to the NRF with respect to the THRIP funding, expressing the dissatisfaction with the organisation of the fund, especially with respect to policy changes. The committee invites SAIP members to participate in the formulation of the response by sending an e-mail to applied@saip.org.za.

The attendance at the conference was well up this year, and the number of MSc entries bodes well for the future.

New chairperson: Dr. K. Meyer

11.2 Astrophysics and Space Science

Activities for the International Heliophysical Year 2007 (IHY2007) have begun with a session during the SAIP conference dedicated to the IHY2007 and it is planned to have the same during 2007 and 2008. The International Heliophysical Year is an international program of scientific collaboration to increase our knowledge of the heliosphere and its interaction with planetary bodies and the ISM (interstellar medium).

New chairperson: Lee-Anne McKinnell (HMO/Rhodes)

11.3 Condensed Matter Physics and Materials Science

Two meetings of the Executive were held during the year. A final document for the Terms of Operation of the CMPMS was prepared and submitted to Council.

At the 2005 SAIP Conference at the University of Pretoria, Prof W Soboyejo of the Princeton Institute of Science and Technology, USA presented a Plenary Lecture on “Frontiers of BioMEMS and Bio-Technology : The Role of Africa”, while no less than three Non-specialist Invited Lectures were delivered by Prof P Ngoepe (“Probing material properties with computational modelling”), Prof JH van der Merwe (“The phenomenon and impact of periodic intercrystalline interfacial interactions”) and Prof W Wesch (“Primary effect of damage formation in semiconductors”). Speakers have also been identified for the 2006 and 2007 conferences.

A special Winter School for SAIP 2006 was planned in honour of Prof FRN Nabarro, who turned 90 this year, in recognition for his excellent and unselfish service to the South African physics community over many years. Two further conferences are also being planned under the auspices of the CMPMS.

New chairperson: Prof. D. Britton (UCT)
11.4 Education
As a contribution to the International year of Physics (IYP) the subgroup was responsible for organizing the first SA Physics Olympiad in Cape Town successfully. An exhibition ‘Physics of toys’ forming part of the MTN sciencenter exhibition travelling around the RSA, was launched. The final contribution to the IYP was the presentation of the Physics in Film lecture series delivered to science centres around the country. Through Diane Grayson liaison with the DoE is continuing regarding the school science curriculum

New chairperson: Dr G Arendse

11.5 Lasers, Optics and Spectroscopy
The 2006 conference the usual NLC user group report back meeting was held on Monday, an arrangement which benefits the lasers optics and spectroscopy community of the SAIP greatly. The subgroup is planning a workshop through the ALC on femto second science early 2007. In addition the NLC, LRI and iThemba LABS are jointly planning a workshop on high power lasers and plasma and accelerator science in the near future. A US-Africa Advanced Studies Institute on Photon Interactions with Atoms and Molecules was held in November 2005 in Durban. Several scientists from the US and the RSA attended, and students from America and Africa took part

New chairperson: Dr. E G Rohwer

11.6 Nuclear, Particle and Radiation Physics
A fast neutron workshop was hosted by UCT during this year, and a pre-SAIP workshop was held at iThemba LAB. An interactive webpage has been activated, and is accessible through the SAIP website

New chairperson: Prof. G. Hillhouse

11.7 Theoretical Physics
The past year was dominated by two very positive events: 1) A very successful summer school in the Chris Engelbrecht series of summer schools in theoretical physics, with the topic ‘Dark side of the universe’. 2) The establishment of the National Institute for theoretical Physics (NITheP) This was recently announced in a press release by the Department of Science and Technology. This was the culmination of several years of preparatory work in the theoretical physics community. Prof H Geyer has been appointed interim director. The institute has nodes in Durban (UZKN) and Johannesburg (WITS) and is housed at the Stellenbosch Institute of Advanced Studies (STIAS)

Chairperson: Prof H Geyer

12 Report from Student Committee
Mr. Combrink, the Student Liaison on Council and chair of the Student Committee, reported that student members made up the fastest growing membership group in the SAIP membership. Currently, one third of all SAIP members are student members. The purpose of the Student Committee was to be the voice of students and their interests, to encourage students to get involved in issues pertaining to students and the community at large. The process is still in its infancy with a constitution still needing to be written. The student body at the 2006 meeting of Physics Students has accepted the terms of reference. The Committee is made up of student representatives from each specialist group.

Mr. Combrink thanked the local organising committee for their assistance.

13 Reports from Representatives on Other Bodies
13.1 SACNASP
Prof. J. Malherbe reported that registration with SACNASP is necessary for physicists offering consulting services. SACNASP confirms the qualifications and experience of the applicant and handles cases of misconduct.

There was a request to Prof. Malherbe that SACNASP respond to its members queries.

13.2 NSTF
Prof. J. Malherbe reported that the NSTF is an umbrella body that promotes Science and Technology and oversees the NSTF awards.
14 Conference Matters

14.1 Current Conference

Prof. R. Madjoe, co-chair of the local organising committee reported on the 2006 conference.

There were four host institutions: the Hermanus Magnetic Observatory, iThemba LABS, the South African Astronomical Observatory and the University of the Western Cape. Prof. Madjoe recommended co-hosting the conference as the burden was not carried by one department.

The conference was held over four days, with 20 minute-presentation slots.

There were 498 registered delegates, of which 294 were students. There were 4 exhibitors, 14 teachers and 17 learners.

Three winter schools were held on Monday, 3 July 2006: Space Science at HMO (thanks to B. Opperman), Nuclear Physics at iThemba LABS (thanks to J. Lawrie) and Solid State Physics at UWC (thanks to D. Adams and R. Nemutudi). The NLC Users Group meeting was also held on 3 July at UWC.

It was difficult finding a venue to accommodate 500 people for the Plenary day. The plenary day was poorly attended (about 300 delegates). Prof. Madjoe expressed his thanks to the plenary speakers and to Prof. P. Whitelock.

Thanks were also expressed to:

1. Dr. P. Mjwara for attending the opening function
2. to the City of Cape Town, especially Mayor Zille for the Mayoral reception
3. Dr. M. Bruton and the MTN ScienCentre
4. the Department of Science and Technology for funding
5. Ms. N. Haasbroek and her team for administrative support
6. Dr. P. Martinez (as representative of the SAIP Council)
7. Mr. C. Rijsdijk

Prof. Moraal thank Prof. Madjoe and Dr. C. Theron for the excellent organisation of the conference.

14.2 Future Conferences

14.2.1 2007 - U. Witwatersrand (Approved)

Dr. P. Martinez reported that that preparations for the 2007 conference were underway. The conference is scheduled for 2 to 6 July. Venues and accommodation have already been booked. Dr. D. Naidoo is chair of the Conference Local Organising Committee.

14.2.2 2008

A venue has yet to be identified.

14.2.3 2009

The University of KwaZulu-Natal has offered to host the 2009 conference.

15 General

15.1 Change in By-law

There were some concerns expressed at a Council meeting in February 2006 regarding the specified age-limit for the Silver Jubilee Award. The specific by-law currently reads:

The Silver Jubilee Medal is awarded for outstanding achievements by a younger physicist in any of the following facets of any branch of physics: research, education, technology and industrial development. Awards will be made to persons who are less than 35 years old on the closing date for the receipt of nominations.

At the Council meeting on 3 July 2006, it was agreed that the following phrasing would be put forward at the 2006 AGM,
The Silver Jubilee Medal is awarded for outstanding achievements by a younger physicist in any of the following facets of any branch of physics: research, education, technology and industrial development. Awards will be made to persons who are 35 years old plus however many years not spent in activities in physics (e.g. women who have taken maternity leave, etc), on the closing date for the receipt of nominations.

The meeting disagreed with the proposed phrasing of the by-law, and the matter was referred back to Council. It was requested that the spirit of the young scientist award be considered, that the clause should not specifically mention women in physics and that full-time/part-time physicists also be catered for.

16 Closure

The meeting closed at 10h10.

Prof. H. Moraal
President

Miss. J. Padayachee
Secretary

Date