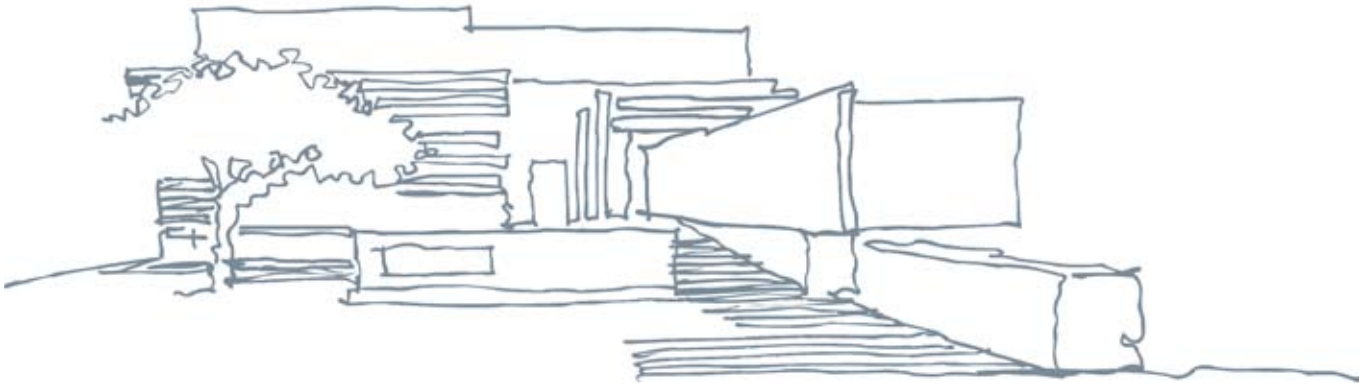


A CREATIVE SPACE FOR THE MIND



stias

STELLENBOSCH INSTITUTE FOR ADVANCED STUDY
STELLENBOSSE INSTITUUT VIR GEVORDERDE NAVORSING



STIAS – a ‘creative space for the mind’, where top researchers and intellectual leaders are nurtured and encouraged to find innovative and sustainable solutions to issues facing the world.

STIAS – a creative space for the mind

The Stellenbosch Institute for Advanced Study (STIAS) is situated on the historic Mostertsdrift farm in the heart of Stellenbosch. The idea for such an institute in South Africa was first conceived in 1999 – it was immediately received with enthusiasm by the local and international research community. Only in 2005, however, when the donation from the Marianne and Marcus Wallenberg Foundation enabled STIAS to build its modern research and seminar centre, did the Institute really come into its own.

Sustainable architecture and beautiful, tranquil surroundings have now fused to form a 'creative space for the mind'. Here, some of the world's foremost researchers and intellectual leaders are nurtured and encouraged to find innovative and sustainable solutions to issues facing the world, and in particular South Africa and the continent as a whole. Even though some of its best minds and promising young leaders work elsewhere in the global community, Africa, through STIAS, has the opportunity for high-level research and intellectual development in an international context. The Institute is already attracting some of the world's leading scholars and researchers, and is enjoying international growth and recognition.

Objectives

The main objectives of STIAS are to

- advance the cause of science and scholarship and invest in the intellectual future of South Africa
- focus on Africa
- provide an independent space where innovative ideas and original thinking can thrive.



Differentiators

STIAS is the first institute of its kind in Africa, modelled on successful examples of institutes for advanced study elsewhere in the world. The Institute facilitates cutting-edge research for achieving breakthroughs in many fields. It offers researchers special conditions that include

- catering for all disciplines and encouraging the cross-pollination of ideas
- a setting that enhances 'out-of-the-box' thinking and values diversity as a creative asset
- its location in South Africa, a country that is itself a crucible of diverse backgrounds, cultures, research traditions, and life experiences, which makes for a uniquely interesting research environment
- a focus on real-life problems and the search for sustainable solutions for the challenges of the country and the continent
- a belief in the potential of Africa as a leading contributor to the global research community and as a producer of new knowledge.

“Fostering advanced study via a ‘creative space for the mind’ works extremely well, together with the generous openness that seems to be the ethos at STIAS.”

Governance and partners

As a registered Section 21 company, STIAS has its own board of directors and enjoys strong partnerships with other research institutions, government, and industry. It has the support of former President Nelson Mandela, the Office of the President, the Minister of Science and Technology, the Wallenberg and Donald Gordon Foundations, several Nobel laureates, and leading research institutions in both developed and developing countries.



Hendrik Geyer (left), Maria Mouton, and Bernard Lategan, responsible for the day-to-day running of STIAS

“The architecture and gardens ...
make this place very special;
the atmosphere created by the personnel
meant I could concentrate fully on
my work. STIAS is a wonderful
combination of matter and mind.”

The logo for STIAS features the word 'stias' in a lowercase, sans-serif font. The letters 's', 't', 'i', and 'a' are orange, while the 'α' is a greyish-blue, and the final 's' is orange. The logo is centered within a white rectangular area that is framed by a thick orange border at the top and bottom.

STELLENBOSCH INSTITUTE FOR ADVANCED STUDY
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A new logo marked the establishment of the STIAS Company and the opening of the Wallenberg Research Centre in 2007. John Pace's contemporary, clean, simple, future- and Africa-orientated design encapsulates the spirit of this independent, national research institution.

The focus on 'a', which stands both for 'advanced' and 'Africa', integrates the core elements of the STIAS mission – to promote research of the highest quality, which is relevant to the region, and which advances the intellectual and creative potential of Africa as contributor to the global search for new knowledge.

The Greek 'α' (alpha) connects different research disciplines and traditions. In the humanities, it is associated with *agape* (theology) and *agora* (philosophy, politics, and the foundations of democracy) – and Greek symbols recur in mathematics, the 'grammar' of the natural and applied sciences. Alpha also signifies 'first', reflecting STIAS as the first institute of its kind in Africa, and its role as the promoter of the seminal beginning of thought and new ideas, of quality, and of excellence.

STIAS – creator of new knowledge

In today's knowledge society, it is crucial to be able to access the latest reliable, appropriate, future-orientated, groundbreaking knowledge, and to process the technologies and know-how that flow from this knowledge. At the same time it is critical to nurture a future generation of independent thinkers and leaders. Leaders are those who not only understand the realities of a changing world, but who also have the ability and skills to define and implement the new advances to benefit their communities.

South Africa – and the continent to which it belongs – must therefore not only be consumers of knowledge and innovation, but also producers of new knowledge in order to fulfil their leadership role in serving the people of Africa.

To this end, STIAS brings high-level international intellectual activity to African soil and, in attracting leading scholars, creates a hub to energize, stimulate, and develop South Africa's and the continent's researchers.

Networks

STIAS forms part of a wide network of national and international research institutions. These include similar older and long-established institutes for advanced study such as those at Princeton, Stanford, Uppsala, Berlin, Wassenaar, Essen, and Budapest. This network also encompasses leading universities in South Africa, Africa, Asia, North America, and Europe. STIAS has close relationships with several foundations, including the Mandela Foundation, the Wallenberg Foundation, the Donald Gordon Foundation, the Bank of Sweden Tercentenary Foundation, and the Flora Family Foundation. It works in partnership with the Association of African Universities and the Association of Commonwealth Universities.



The Wallenberg Research Centre

Formally opened on 15 November 2007, the Wallenberg Research Centre at STIAS provides up-to-the minute modern facilities for Fellows, as well as multipurpose conference accommodation that brings scholars, researchers, decision-makers, and members of civil society together in a great variety of ways. This building was made possible through the generous R28-million donation from the Marianne and Marcus Wallenberg Foundation of Sweden.

The Centre provides private space and state-of-the-art equipment for up to 22 researchers at a time, as well as seminar facilities. Here, STIAS Fellows can enjoy a place, space, working conditions, and congenial atmosphere that allow for productive scholarly interaction and innovative thinking. The building's individual, soundproofed study rooms offer optimal privacy for concentrated and undisturbed work, while its communal areas encourage optimal interaction for exchanging viewpoints and perspectives and to stimulate new thought.

In designing the new Centre, architect Hein Visser's aim was, in his own words, "to ensure the feeling of free-flowing space which sets no limits to the mind, opening new vistas and unexpected perspectives." The modern building also had to respect the tradition represented by the adjoining historic 19th-century ones at

Mostertsdrift. To connect old and new, Visser used "the historic *leivoor* [irrigation stream] running in front of the manor house and cellar as the planning axis", with three water features to "symbolize the continuation of the *leivoor* and form the spine of the new building."

Air conditioning helps to make the building comfortable during all seasons, especially in the hot summer months, but the emphasis is on low energy-consumption and low maintenance, with liberal use of double glazing and solar heating. The water-wise garden is filled with hardy plants, indigenous to the Western Cape.

Wherever they are in the Centre, those who work and visit there are constantly aware of the Jonkershoek Valley and the natural beauty surrounding them. The spacious south terrace overlooks the vineyard and the mountains beyond, and each of the Fellows' private offices offers views of the garden, the manor house, or the *Pieke* in the distance.

In such an environment, STIAS expects its projects to continue to grow and expand, and for the solutions and new knowledge they bring to endure, and to benefit and reward the researchers, the country, and the continent in which they were generated.

*Profile of Peter Wallenberg,
Chair of the Wallenberg Foundations*





History and achievements

STIAS time-line

1999 (Nov): STIAS established by a decision of the Council of Stellenbosch University

2000 (Jan): Launch of the first three research projects of STIAS

2000 (Nov): First meeting of the Scientific Advisory Board

2001 (Mar): The historic Mostertsdrift property of 2.6 ha earmarked for the exclusive use of STIAS

2002 (Feb–Nov): Restoration and refurbishing of the manor house to serve as headquarters for STIAS. Main sponsor: Karel Bos

2003 (May–Oct): Restoration of the wine cellar to house SACEMA (the South African Centre for Epidemiological Modelling and Analysis – a Department of Science and Technology Centre of Excellence). Main sponsors: The Swedish Bank Tercentenary Foundation and Stellenbosch University

2004 (Mar): Official opening of the Mostertsdrift campus

2004 (Dec): Visit by Dr Peter Wallenberg, Chair of the Wallenberg Foundations

2005 (Jan): Official announcement by the Marianne and Marcus Wallenberg of Sweden of a grant of R28 million to build a research and seminar centre at Mostertsdrift

2006 (Jun): Construction of the research and conference centre starts

2006 (Dec): Decision by the Council of Stellenbosch University to establish STIAS as an independent Section 21 company with its own Board of Directors

2007 (May): First meeting of the STIAS Board of Directors, chaired by Desmond K. Smith (director of companies)

2007 (Nov): Official opening of the Wallenberg Research Centre

2008 (Feb): First Fellows start working in the new building

2008 (May): Opening of the NITheP (National Institute for Theoretical Physics) housed in the south wing of the Wallenberg Research Centre – attended by Minister Mangena of the Department of Science and Technology, Stephen Hawking, and Nobel laureates David Gross and George Smoot

2008 (Sep): Planting of the Izak Perold experimental vineyard at Mostertsdrift.

Location and achievements

STIAS is situated on the historic Mostertsdrift property in Stellenbosch, which dates back to 1693, when the farm was granted to Jan Cornelis Mostert by the Dutch authorities. The manor house dates from 1820, the wine cellar from 1848, and the lovingly restored old buildings on the site are protected by the South African Council for National Heritage.

Alongside the old Cape Victorian farmhouse stands the Wallenberg Research Centre – old and new in dialogue with each other, providing a peaceful ‘away-from-it-all’ setting for dedicated scholarship.

In the past, Mostertsdrift formed part of the Lanzerac wine farm in the Jonkershoek valley. In line with the property’s close relationship





with wine and the role of STIAS as promoter of innovative research, the idea was mooted to plant an experimental vineyard on the half-hectare plot on the southwest corner of the property in front of the Wallenberg Centre. While the focus of much of the research at STIAS is on theoretical work, the vineyard's efforts are directed towards hands-on experimentation. In due course, it will perhaps supply STIAS with a ground-breaking wine under the Institute's own label!

During its first decade of operation as a research centre, STIAS has demonstrated the pressing need for an institution of this kind in South Africa and on the African continent, the depth of intellectual resources available, and the eagerness of scholars from a variety of disciplines and backgrounds to work constructively together to find sustainable solutions for the pressing challenges of our time.

STIAS has

- demonstrated the importance of providing an independent intellectual space, free from existing paradigms, power structures, and other interests, for researchers to work experimentally, to think 'out of the box', and to explore alternative options without restriction
- provided a tranquil and supportive environment where it is possible to think and work, free from the interruptions and demands of normal day-to-day academic life
- developed an 'ethics of sharing and interaction', where the diversity of disciplines and ideas can stimulate new insights and innovative ideas
- attracted some of the leading thinkers of our time, including Nobel laureates, prominent international and local scholars, and representatives of the next generation of researchers
- won acceptance as a 'national facility', not only from formal institutions such as South Africa's Department of Science and Technology and National Research Foundation, but also from

researchers at leading universities and institutes in South Africa and abroad who take up STIAS Fellowships

- launched a successful research programme, involving more than 20 larger projects and over 80 Research Fellows
- become the intellectual hub of a powerful consortium of institutions dedicated to Africa's long-term development
- built a research network involving similar institutions on the continent and in other parts of the world
- gained recognition from the SIAS group of established institutes, which has nominated a representative as a member of the STIAS Company
- created a neutral venue for new initiatives, and, by means of 'consultations', facilitates the exploration of innovative thinking and alternative approaches
- earned the support of industry, government institutions, and non-governmental organizations
- succeeded in attracting local and international donors from the public and private sectors, at home and abroad.





Neil Turok and Gerard 't Hooft



S. James Gates



Sydney Brenner



Mamadou Diawara



Cheryl de la Rey

Fellows of STIAS

By 2009, more than 80 researchers had accepted invitations as Fellows of STIAS. These include three permanent visiting Fellows, who come to the Institute to work whenever they have the opportunity: Nobel laureates Sydney Brenner and Gerard 't Hooft, and Neil Turok, Director of the Perimeter Institute for Theoretical Physics.

Other researchers of note who are STIAS Fellows include: Gregory Alexander (Cornell), Neville Alexander (Cape Town), Manuel Castells (Southern California, Annenberg), Michael Chapman (KwaZulu-Natal), Rosemary Coombe (York, Toronto), Drucilla Cornell (Cape Town), Cheryl de la Rey (South African Council on Higher Education), John de Gruchy (Cape Town), Mamadou Diawara (Frobenius Institute, Frankfurt), Evelyn Fox Keller (Massachusetts Institute of Technology), Nancy Fraser (New School for Social Research, New York), S. James Gates (Maryland; present STIAS company representative of Fellows), Wayne Getz (Berkeley), Pumla Gobodo-Madikizela (Cape Town), Brian Goodwin (Schumacher), Jan Govaerts (Leuven), Kevin Gray (Cambridge), Wolfgang Huber (Berlin), Hans Joas (Erfurt), Harry Kunneman (Universiteit voor Humanistiek, Utrecht), Johann Lutjeharms (Cape Town), Denis-Constant Martin (Centre d'Etudes et de Recherches Internationales, Paris), Deirdre McCloskey (Illinois, Chicago), Bill Nasson (Cape Town), Njabulo Ndebele (Cape Town), Norman Owen-Smith (Witwatersrand), Claire Penn (Witwatersrand), Robert Ross (Leiden), Jörn Rüsen (Kulturwissenschaftliches Institut, Essen), Philippe Salazar (Cape Town), Clifford Shearing (Cape Town), David Speert (British Columbia), Leonard Susskind (Stanford), Wentzel van Huyssteen (Princeton), Charles van Onselen (Pretoria), Henk Wesseling (Leiden and Netherlands Institute for Advanced Study), Hans Westerhoff (Vrije Universiteit Amsterdam), Peter Weingart (Zentrum für interdisziplinäre Forschung, Bielefeld), Herbert Wiegand, (Heidelberg), Adam Wilkins (Cambridge), Edmund Wnuk-Lipinski (Warsaw), and Olaf Wolkenhauer (Rostock).

“Nothing compares to the collegiality and quiet professionalism of STIAS, which provided me with a fellowship experience of the highest calibre.”

There is no formal application procedure for STIAS Fellowships; the STIAS Director, Research Programme Committee, and Research Advisory Committee are guided in their choice of projects and Fellows by the following considerations when responding to pre-proposals (solicited or otherwise) and extending invitations to submit short proposals for peer evaluation.

■ Level

Does the proposal entail research on the highest level? Are the proposed participants capable of delivering this?

■ Innovation

Is the project breaking new ground? Does it hold the promise of new insights and the potential to produce new knowledge?

■ Interdisciplinarity

To what extent is the project dependent on the cooperation and contribution of other disciplines?

■ Relevance

What relevance does the project have for South Africa and Africa as a whole?

■ Feasibility

How convincing is the proposed method and research design, and how realistic is the research plan?

For further details visit www.stias.ac.za

Research projects

COMPLETED PROJECTS

Merging the Layers of Life

Development of a (mathematical) model suitable for integrating the different levels of biological research (sub-molecular, molecular, organisms, populations) in one framework.

Project leader: Jannie Hofmeyr (Stellenbosch)

Fellows: Hans Westerhoff (Amsterdam) and Wayne Getz (Berkeley)

String Theory and Quantum Gravity

Exploration of the latest developments in theoretical physics, with special reference to the implications of string theory for quantum gravity.

Project leader: Hendrik Geyer (Stellenbosch)

Fellows: Leonard Susskind (Stanford), James Gates (Maryland), Jan Govaerts (Brussels), and Robert De Mello Koch (Witwatersrand)

Dealing with the Past (Historical Memory)

Why do some individuals or societies transcend their divisive past and why do others remain prisoners of their past? A study in the ambiguity of memory in the light of the work of the Truth and Reconciliation Commission in South Africa and similar attempts to overcome recent history in different countries.

Project leaders: Jörn Rüsen (Essen) and Mamadou Diawara (Bamako and Frankfurt)

Fellows: Justin Bisanswa (Kinshasa and Quebec), Patrick Harries (Basel), Bogumil Jewsiewicki (Quebec), Elisio Macamo (Mozambique and Bayreuth), and Masayuki Sato (Kofu, Japan)

Social and Economic Justice

The South African Constitution contains extensive social and economic rights. The interpretation of these rights, most markedly by the Constitutional Court itself, has thus far had to rely on a tradition of jurisprudence based on the theory and practice of individual

human rights. The aim of this project was to develop a theoretical framework, derived from the workings of the Court, that would provide a basis for the equitable and consistent application of social and economic rights.

Project leader: André van der Walt (Stellenbosch)

Fellows: Greg Alexander (Cornell), Aeyal Gross (Tel Aviv), and Istvan Pogany (Warwick)

Good Governance and Poverty Relief

The project explored the hypothesis that the eradication of inequalities (especially the alleviation of poverty) in developing regions, in particular in Africa, is directly dependent on the practice of good governance – not only by governments, but also in the corporate and NGO sectors of society.

Project leader: Ulf Engel (Leipzig)

Fellows: Tim Shaw (London), Philip Nel (Otago), Alfred Nehema (Nairobi), and Robert Kappel (Hamburg)

HIV Strain Dynamics

A growing concern in HIV research is the emergence of drug-resistant strains of the virus. This could have far-reaching consequences for treatment strategies and the South African government's antiretroviral treatment plan. The dynamics between host and virus and the factors contributing to drug resistance have not been adequately understood. The project used analytical and numerical methods on appropriately crafted models to obtain new levels of understanding regarding the host-virus dynamics. The project was a joint undertaking with SACEMA (see p. 11).

Project leader: Gareth Witten (Cape Town)

Fellows: Ekkehard Kopp (Hull), Wayne Getz (Berkeley), David Bangsberg (San Francisco), and Cathal Seoighe (Western Cape)



The Quality of Young Democracies

After the initial euphoria surrounding democratic transitions since the early 1990s, what is the present state and future prospects of these young democracies? How deeply embedded is the democratic spirit, and how strong are the democratic ethos and culture? A comparative and empirical study of the current situation in Poland, Germany, South Korea, South Africa, Turkey, and Chile, in the second phase of democratization.

Project leader: Ursula van Beek (Stellenbosch)

Fellows: Hans-Dieter Klingemann (Berlin), Edmund Wnuk-Lipinski (Warsaw), Dirk Bergschlosser (Marburg), Radek Markowski (Warsaw), Thorleif Petterson (Uppsala), and Yilmaz Esmer (Istanbul)

CURRENT PROJECTS

Developing a Model for Electronic Dictionaries

The advent of the electronic area has opened new ways to conceptualize and to organize knowledge. Paradoxically, electronic dictionaries have not exploited these possibilities. They tend merely to be electronic versions of printed dictionaries, and are generally of mediocre quality. The project aims to develop a new theoretical model for electronic dictionaries. This is of special relevance in the multilingual context of Africa.

Project leader: Rufus Gouws (Stellenbosch)

Fellows: Herbert Wiegand (Heidelberg), Ulrich Heid (Stuttgart), Paul Mavoungou (Libreville), and Afana Ostage (Libreville)

Ethics, Politics, and the Law

A critical investigation of post-apartheid South African life under a transformed legal, political, and social order from the perspective of women. Taking the concrete lives of women in the new dispensation as a point of departure, the tension between the 'public' face of the new legal order (human

rights, constitutionalism) and the 'private' reality of individual lives is examined. The aim is to find alternative forms of subjectivity and agency – other than those produced by a liberalist private economy or by autonomous individuals – regarding lives of women, which could resist new and old forms of hegemony.

Fellow: Karin van Marle (Pretoria)

A Critical Assessment of New Developments in Complexity Theory

Over the last two decades, complexity theory has had a strong impact on the epistemological foundations of several disciplines, especially in the way in which it generates a transdisciplinary discourse. The project assesses this impact critically. In the first phase, the problem of difference and identity is analysed from the perspective of complexity, with particular focus on the ethical implications of acknowledging complexity. The second phase investigates the implications of complexity theory for developing an integrated understanding of the notions of 'justice' and 'sustainability'.

Project leader: Paul Cilliers (Stellenbosch)

Fellow: Harry Kunneman (Universiteit voor Humanistiek, Utrecht)

Ecoinformatics

The field of ecoinformatics has emerged to encompass the interpretation of data relevant to ecological and broader environmental processes. It is aimed at facilitating environmental research and management by developing ways to access and integrate databases and develop new algorithms to test ecological hypotheses. Hence it encompasses not only the management and dissemination of information, but also ecological modelling and statistical



assessment. The project will develop a structured approach with special relevance to African conditions. This approach includes identifying information technology that could be applied, exploring modelling approaches, assessing applicability to existing African datasets, and networking locally and internationally for research in the long term.

Project leader: Wayne Getz (Berkeley)

Fellows: Norman Owen-Smith (Witwatersrand), John Oguto (Nairobi), and David Saltz (Ben Gurion)

The Role of Knowledge Experts

The advent of the knowledge society has placed the spotlight on the role of experts as brokers of knowledge and, in particular, as gatekeepers who control the knowledge flow. This problem concerns developed and developing countries alike. In developing countries, the problem is exacerbated by the imbalances in the production and access to knowledge, increasing the possibility of a new form of 'knowledge colonialisation' and dependency.

Project leader: Johann Mouton (Stellenbosch)

Fellow: Peter Weingart (Bielefeld)

Genres of Critique

This project seeks to open and explore a liminal space for critique between aesthetics and politics, and elaborates and expands the meaning and significance of critique for political and legal discourse. The focus and immediate grounding is concerned with African and South African implications. Drawing on multiple aesthetic forms, especially literature, the development of a genre of critique for legal discourse will be pursued that supersedes realism and linguistic indeterminacy in existing genres of critique.

Project leader: Karin van Marle (Pretoria)

Fellows: Stewart Motha (Kent) and Njabulo Ndebele (Cape Town)

Urban Music and Identities

Cape Town has a rich and diverse musical heritage, shaped by many cosmopolitan influences. From the perspective of the sociology of music, this project examines the expression of identities and the organization of social networks in a cosmopolitan urban setting. Apart from the importance for the transformation of the Western Cape, a hot spot of differing identities, the aim is also to develop a methodology to understand better the complexity and dynamics of processes of social aggregation and identification.

Fellow: Denis-Constant Martin (Paris)

Bilingual Education

A socio-linguistic investigation into the challenges and possibilities of bilingual education for children, communities, and wider society. The focus is on the role that the linguistic and literary practices of students and teachers in these situations play in the formation of linguistic and cultural identities. By comparing the use of English and Spanish in New York City with the situation of bilingual education in South Africa, the aim is to contribute to the formation of educational policy for ethno-linguistic minorities in ethnically and culturally diverse contexts.

Fellow: Ofelia Garcia (New York)

A Socio-Historical Perspective on Organized Crime

The project investigates organized crime around the Atlantic seaboard from an unusual perspective – by tracing the migration of Russo-Polish criminals to North and South America and to South Africa between 1881 (after the assassination of Tsar Alexander II) and 1914. Using originally developed techniques of social history, the aim of the study is to gain new insights into the origin of organized crime, its trans-national and trans-continental expansion, and the social dynamics driving these processes.

Fellow: Charles van Onselen (Pretoria)



Emerging Legal Geographics of Cultural Rights

The project focuses on developing an interdisciplinary theoretical framework to explain the growing proliferation of cultural rights claims under conditions of neoliberalism. Cultural rights in international law include intellectual property rights; rights of minorities, including indigenous peoples, to maintain and to develop their cultural heritage; rights to participate in cultural life; and rights to international cultural cooperation.

Project leader: Rosemary Coombe (York)

Faith and Fabric

Conventional secularization theory holds that, as societies become more secular, the need for religion will diminish and even disappear. This view is seriously challenged by the resurgence of religion in 'post-secular' societies such as Europe and North America (Graf: *The Return of the Gods*, Joas: *Do We need Religion?* Taylor: *A Secular Age*). The project builds on work conducted at the Wissenschaftskolleg in Berlin and examines the role of religion in different 'civilization sites' with special emphasis on Africa. It focuses on several fundamental and theoretical questions. Fundamental questions include issues such as: How are the values generated that human beings live by and that constitute the fabric of societies? What is the role of faith in this process, of particular forms of faith in specific social contexts? Theoretical questions include issues such as: What is the role of faith(s) in the formation, for example, of notions and practices of human dignity, justice, reconciliation, peace, and tolerance? What is the role of faith(s) in notions and practices leading to conflict and exclusion?

Project leader: Dirk Smit (Stellenbosch)

Fellows: Hans Joas (Erfurt and Chicago), Samuel Kobia (Geneva), Wolfgang Huber (Berlin), and Nicholas Wolterstorff (Yale)

TOPICS UNDER CONSIDERATION

A Recent History of Humankind

A project that seeks to integrate archaeological, biological, and physical data to enable a comprehensive understanding of human development.

Project leader: Sydney Brenner (Cambridge)

A New Liberal Curriculum

Given the increasing integration of knowledge from the most diverse disciplines, can we develop a new liberal curriculum that would be the required reading for the next generation of researchers at the forefront of knowledge production?

Project leader: Sydney Brenner (Cambridge)

For publications following from these projects visit www.stias.ac.za

“Most valuable was my daily interaction with the other fellows, with whom, despite our widely disparate disciplinary differences, I found a great deal in common, and who provided substantive support and encouragement in many ways.”



NITheP and SACEMA

STIAS shares its Mostertsdrift facilities with two other research institutions, which are governed independently: the National Institute for Theoretical Physics (NITheP) and the South African Centre for Epidemiological Modelling and Analysis (SACEMA). Both are directly funded by the Department of Science and Technology (DST) through the National Research Foundation (NRF).

SACEMA is accommodated in the refurbished wine cellar of the original Mostertsdrift farm, and NITheP is located in the southern wing of the Wallenberg Research Centre.

While each operates independently, STIAS, NITheP, and SACEMA share many objectives and maintain close links. All three of them also cooperate closely with the Cape Town-based African Institute for Mathematical Sciences (AIMS).

NITheP

The NITheP was established following an international panel's report in 2004, "Shaping the Future of Physics in South Africa", commissioned by the Department of Science and Technology, the National Research Foundation, and the South African Institute of Physics. It recommended the establishment of a user facility for South African and African theoretical physicists, similar to the Kavli Institute in Santa Barbara and the International Centre for Theoretical Physics in Trieste, where office space is provided to visitors and longer-term workshops on current research topics are held. The idea was strongly supported by the international physics community.

In May 2008, NITheP was officially launched at the STIAS Wallenberg Research Centre by the Minister of Science and Technology, Mr Mosibudi Mangena, with Stephen Hawking and Nobel laureates David Gross and George Smoot in attendance.



Mr Mosibudi Mangena, with Stephen Hawking.

The Institute's vision is to lead and coordinate research programmes and to foster education in theoretical physics, so as to allow South African to play its rightful international role in a truly fundamental scientific field.

Its mission is to provide a stimulating national and African user facility for theoretical physics, linking South Africa and the continent to the international family of similar institutions, where its programmes are recognized for their excellence in research, as well as for the innovative role they play in theoretical physics education, especially in under-represented communities.

Hawking termed the establishment of NITheP "a significant development for basic science in South Africa and on the African continent," while Gross encouraged "building on [South Africa's] excellent intellectual capital and reaching out to the rest of the continent."

For more information visit www.nithep.ac.za

SACEMA

The South African Centre for Epidemiological Modelling and Analysis (SACEMA) is a national research centre established under the Centre of Excellence programme of the DST and the NRF, and was launched in May 2006

The Centre focuses on research in quantitative modelling of the spatial and temporal patterns of disease. The immediate aim of its work is to understand better and predict more accurately the development of various diseases, and thereby to provide advice on how best to combat them. While present research programmes focus on issues pertaining to HIV/AIDS, tuberculosis, and malaria, the scope of SACEMA's activities extends beyond these to include other epidemiological problems.

For more information visit www.sun.ac.za/sacema



Looking ahead

During its initial phase, the Institute progressed in small steps and ensured the building up of a solid foundation. Now that this is in place, further expansion is called for. The enthusiastic reception by the research community and all the STIAS stakeholders augurs well for the future. Provided that the necessary financial support is forthcoming, the Institute looks forward to

- the extension of its research programme
- welcoming a full complement of Research Fellows in the Wallenberg Research Centre
- strengthening its cooperation with research institutions in Africa and further afield
- increasing its interaction with government, industry, and civil society, and disseminating the results of its research programme more effectively to decision-makers in these environments
- developing the Club of Fellows as a support network, amongst other things to recruit future Fellows, propose new research projects, and attract additional funding
- extending accommodation options within walking distance from STIAS, and providing further facilities for Fellows.

STIAS sponsors

Generous sponsors have enabled STIAS and its research programme to develop and grow. They include

- The Marianne and Marcus Wallenberg Foundation
- Stellenbosch University
- Bosal International
- Daimler Chrysler
- The Donald Gordon Foundation
- The Swedish Bank Tercentenary Foundation
- Absa Bank
- The Flora Family Foundation
- Stanford University
- The Kulturwissenschaftliches Institut NordRhein-Westfalen
- The Netherlands Institute for Advanced Study
- The Volkswagen Foundation
- The Heinrich Böll Foundation
- The National Research Foundation of South Africa
- The Department of Science and Technology of South Africa
- Het Jan Marais Nationale Fonds.

“The physical space of STIAS makes its conceptual space a reality.”

Funding categories

■ Research Fellowships and Research Projects

The inclusive cost of a research fellowship (travel, accommodation, stipend, administration and overheads) is currently R250 000 per year

■ Trust Fund

The development of a trust fund of R60 million is planned over the next five years to ensure the financial independence of the Institute

■ Infrastructure and Facilities

The completion of Phase 3 of Mostertsdrift (residential units for Research Fellows) will require a further R30 million.

Naming rights

Naming rights are available to donors.



Peter Wallenberg

“Congratulations on STIAS’s impressive debut in the global research community!”

Further information

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