African Women in
Mathematics
Conference

The Plenary Speakers

Prof Ingrid Rewitzky

Women in Mathematical Communities

At Stellenbosch University Ingrid Rewitzky has been involved in educational leadership within and across relatively complex environments through her roles as Professor of Mathematics (since June 2009), Executive Head of the Department of Mathematical Sciences (since 1 January 2010), and Vice-Dean (Learning and Teaching) of the Faculty of Science (since 1 October 2011) and through serving on committees in the department, faculty, and university. In December 2018 Ingrid was honoured with the Stellenbosch University Chancellor's Award in recognition of sustained excellence throughout her career.

On her journey as an academic and educational leader, Ingrid has encountered challenges, tangents, and discoveries. Most importantly, she has become a critical professional enjoying interdisciplinary engagement while retaining a strong interest in Mathematics. Her personal growth and satisfaction as an academic and educational leader are integrally linked to understanding and establishing connections between a diversity of perspectives through her involvement in challenging multidisciplinary research projects, in facilitating and supporting a scholarly approach to learning and teaching in the Faculty of Science, and in inspiring and mentoring colleagues to reach their goals with an understanding of the challenges facing the higher education sector in South Africa.

Prof Nouzha El Yacoubi

Professor Nouzha EL YACOUBI has been elected President of the African Mathematical Union (AMU) for the period 2017-2021 by the AMU General Assembly held in July 2, 2017, in The Sciences faculty, University Mohammed V, Rabat, Morocco, in the framework of the 9th edition of the Pan African Congress of Mathematicians (PACOM 2017, July 3-7, 2017). **She is the first African women mathematician to hold such prestigious position.** She was the AMU Vice – President (for North Africa) during the period 2013-2017, the AMU Secretary General (2004-2009) and the Chairperson of the AMU Commission on Pan African Mathematics Olympiads AMUPAMOC during the period 1995-2009. Also Since 2013, at present she is the Regional Coordinator (for North Africa) of the African Mathematical Millennium Science Initiative (AMMSI).

Prof. El Yacoubi is member of several international organisations like: International Centre for Pure and Applied Mathematics (CIMPA), Organization for Women in the Science for the Developing World (OWSD), Ambassador of The International Mathematical Union Commission for Women in Mathematicians (CWM) etc.

Prof El Yacoubi has been involved in many reports on the mathematics development in Africa, for example in "Mathematics Opportunities and Challenges in Africa" elaborated upon the request of the John Templeton Foundation in (2009), in the International Mathematical Union Report on Mathematics development in Africa (MENAO, ICM 2014) and she will contribute in the 43rd Annual meeting of the International Group of Psychology of Mathematics Education (PME 43) to be held from 7 to 12 July 2019 in Pretoria, South Africa.

Since 1995 in her capacity of AMUPAMOC Chairperson, she organized regularly editions of Pan African Mathematics Olympiads in several African countries. Her determination to improve PAMO, encourage her, since 2000 to introduce new PAMO regulations, to launch workshops for PAMO team leaders training (PAMOSTAR), and to involve International Mathematics Olympiads (IMO) experienced team leaders in PAMOSTARs and PAMOs Problems Committee.

Her willing to go ahead for the development of mathematics in Africa at various level, her numerous initiatives and her exceptional dynamism allowed her to be awarded by a project grant from the John Templeton Foundation, which has been determinant first for enhancing the participating countries rate for PAMO, secondly in supporting some African countries to be introduced in IMO, and to publishing PAMO, PAMOSTAR Proceedings, and AMU Information Bulletins, under her leadership.

She has been an active member of the Local Organizing Committee (LOC) of The 4th Pan African Congress of Mathematicians (PACOM 1995) held in Ifrane, Morocco in 1995 and the Chair of the PACOM 2017 LOC held in Rabat.

In her capacity as AMU Secretary General, she encouraged the various Mathematical African Networks created since 1990, and committed herself to federate all these African Networks under the AMU umbrella, by attending all their activities and requesting funding from international organizations to assist them.

As for her scientific profile: she has been talented student in mathematics very earlier and has been directed for the mathematics studies since the secondary school where she succeeded to get the most important diploma "mathematics Sciences Baccalaureate" in 1969 as the first Moroccan girl in such studies. She has been granted by the Moroccan government with an interesting scholarship allowing her to attend the Architecture school of Bordeaux. After one year she came back in Morocco to join her husband and she decided to renounce to Architecture for Pure Mathematics studies where she succeeded to get her Licence (1974), First Doctorate (1978) as first Moroccan women to get such diploma in Morocco, and her State Doctorate (Ph.D) in 1995 later in Pure Mathematics (Non associative Topological Algebras), because she had to take care of her six children (among them quadruplets born in 1978).

During all that time, Dr El Yacoubi committed herself to continue to contribute in mathematics teaching and research (secondary school from 1974-1978), High school of teacher training (1978-1986), Faculty of Sciences in Rabat (1986- 2015).

Prof. El Yacoubi contributed in many national Projects (Co-Author of Mathematics text books in Arabic for secondary school, Member of the National Commission for "Moroccan Mathematics Aggregation" and also member of "Moroccan Mathematics Aggregation Jury"; member of the National Selection commission for scholarships to be awarded to African students for studies in Morocco; member of the Franco- Moroccan Commission for Mathematics Teachers training, member of the Morocco-Belgium commission for Mathematics Teachers training, etc.

Prof EL YACOUBI visited many universities through the word as invited researcher, speaker etc. in particular, she contributed in many Dissertations Jury through Africa as member, reporter or President of the Jury.

Since 2008, she has been interested by Mathematics Education, so she has contributed as member of an UNISA Project on Professional Development of Mathematics Teachers (2012) with a published paper; panelist in a Plenary Panel in ICME 2012 In Seoul, South Korea; panelist in the Second African Forum on Science Technology and Innovation (STI), Rabat, Morocco (2014); Keynote Speaker in the 7th Science Mathematics and Technology Education SMTE (2015) In Sultanate of Oman; Invited speaker for ICME 2016 in Hamburg, Germany; panelist at the IMU Commission for Developing Countries (CDC) Panel (2018) at Rio the Janeiro, Brazil, organized during the International Congress of Mathematicians (ICM 2018).

Prof Nancy Neudauer

Nancy Ann Neudauer received her MA and PhD in Mathematics, with a minor in Business and Law, and her BBA in Actuarial Science and Risk Management, all from the University of Wisconsin. She is the Director of the MAA Dolciani Mathematics Enrichment Grant Program, which funds projects for mathematically talented middle and high school students, and was Associate Director (2004-2019) of Pacific Northwest Project NExT, a faculty-development program for those interested in innovative pedagogy.

As a Fulbright Specialist, she has visited the African Institute of Mathematical Sciences (AIMS) Centres in South Africa, Tanzania, Ghana, and Cameroon and the Universidad Antonio Narino in Colombia. She taught graduate courses at these AIMS Centres and also at AIMS Rwanda, and has returned to supervise Masters Theses in Cameroon, Rwanda, and Ghana.

She holds a Simons Foundation Mathematics Collaboration Grant. Actively involved with the Mathematical Association of America for as long as she can remember (she gave her first talk at an MAA meeting while still a high school student), she has more recently served as the Visiting Mathematician to their national offices, as well as on the Board of Governors. Nancy is the recipient of the MAA PNW Distinguished Teaching Award. She sits on the Board of Editors of the College Math Journal.

Beyond her primary mathematical research in matroid theory, graph theory, combinatorics, and enumeration, she has applied mathematics to several projects in industry and science. She has been a Visiting Scholar at several universities, is Program Chair for the Combinatorial Potlatch, and has organised many conferences. Speaking on her mathematical and pedagogical research, Nancy organizes sessions and presentations around the world to diverse audiences.

When not sharing the beauty of mathematics with her students, she races sailboats and travels wherever she can, rarely leaving the house without her passport and a packed bag, just in case.