

ACADEMIC PROGRAMME

Legend: Educational levels	Legend: Meetings		Legend: Presentations	
FP: Foundation Phase IP: Intermediate Phase SP: Senior Phase FET: Further Education and Training Phase HE: Higher Education TED: Teacher Education	RM : Regional Meetings AGM: Annual General Meeting IGM: Interest Group Meetings DPS: Discussion with plenary speakers PD: Panel Discussions	1h30 1h30 1h00 0h30 1h30	Plenary addresses LP : Long Papers SP: Short Papers PD: Panel Discussions WS: Workshops HIT: How I teach MM: Maths Market MP: Mathematics Project	1h30 1h00 0h30 1h30 1h00/2h00 0h30 1h00 2h30

SUNDAY 24 JUNE 2012

TIME	EVENTS
14:00–18:00	Registration Foyer E3
15:00-16:30	Pre-congress workshop (GeoGebra): Gerrit Stols (UP) E3 G11
17:00 - 18:30 (Repeat)	Pre-congress workshop (GeoGebra): Gerrit Stols (UP) E3 G11

MONDAY 25 JUNE 2012

Long and Short papers

08:00-10:00 Registration	<p style="text-align: center;">Tea and coffee Registration: Foyer of Auditorium</p>							Sponsored by Sharp
10:00-11:00 Opening Ceremony	<p style="text-align: center;">Opening Ceremony Opening address: Deputy Minister of Basic Education, The Honourable Enver Surty Auditorium</p>							
11:00-12:30 Plenary	<p style="text-align: center;">Plenary Address: Tim Rowland "Explaining Explaining" Chair: Hercules Nieuwoudt Auditorium</p>							Sponsored by CASIO
12:30 – 13:30 Maths Market	<p style="text-align: center;">Introduction to the Casio fx-82ZA plus scientific calculator MM E5 Room 1</p>			<p style="text-align: center;">Introduction to the Casio fx-82ZA plus scientific calculator MM E5 Room 2</p>				
13:30-14:30	LUNCH: C5							
	FP	IP & SP	SP	SP & FET	FET	FET & TE d	FET & TE d	
14:30 -15:25	<p style="text-align: center;">Conceptualising procedural fluency as a spectrum of proficiency</p> <p style="text-align: center;">Mellony Graven Debbie Stott</p> <p style="text-align: center;">LP E5 Room 1</p>	<p style="text-align: center;">Primary Teacher Imagination: The emergence of identities through participation in a Numeracy Community of Practice</p> <p style="text-align: center;">Peter Pausigere Mellony Graven</p> <p style="text-align: center;">LP E5 Room 2</p>	<p style="text-align: center;">Exploring moderating effects of reflection and mathematics confidence on the performance of a mathematics task</p> <p style="text-align: center;">Divan Jagals Marthie v.d. Walt</p> <p style="text-align: center;">LP E5 Room 3</p>	<p style="text-align: center;">A further exploration of differences in the performance of Grade 12 pupils on two types of Geometry problems</p> <p style="text-align: center;">Roger MacKay</p> <p style="text-align: center;">SP E5 Room 4</p> <p style="text-align: center;">SP & FET</p> <p style="text-align: center;">The notion of "topic" in school mathematics and the problem of isotopic coherence</p> <p style="text-align: center;">Shaheeda Jaffer</p> <p style="text-align: center;">SP E5 Room 4</p>	<p style="text-align: center;">Some mathematical possibilities: Inferences in the building of a rondavel</p> <p style="text-align: center;">Sibawu Siyepu</p> <p style="text-align: center;">LP C5 G05</p>	<p style="text-align: center;">A few remarks on the teaching of inequalities to Grade 10 students</p> <p style="text-align: center;">Derek Gripper Zain Davis</p> <p style="text-align: center;">LP C5 G06</p>	<p style="text-align: center;">Impact of e-learning interventions on the performance of first year university students in mathematics</p> <p style="text-align: center;">Omar Sheikh</p> <p style="text-align: center;">LP C5 G07</p>	

MONDAY 25 JUNE 2012

	FP	IP & SP	SP & FET	SP & FET	SP	FET & TEd	FET & TEd	FET & TEd	
Short papers	15:30 – 16:00	Homomorphisms, counting and the constitution of addition in a Grade 1 lesson Zain Davis	Investigating the impact of NPO's mathematics workshops on learner performance Nomathamsanga Mahlobo	Teachers' claims about their competence in teaching data-handling in Grade 11 Eva Makwakwa David Mogari	An exploration of Mathematical Literacy teachers' perceptions of, and performance in Mathematical Literacy tasks based on Algebra Sifiso Vilakazi Sarah Bansilal	A critical analysis of a textbook activity: The teaching and learning of addition and subtraction of integers in the Senior Phase Stanley Adendorff	Teachers' understanding of a key algebra concept Rencia Lourens Karin Brodie	The role of NGO's in the teaching and learning of mathematics in South Africa Themba Ndaba	Mathematical proficiencies displayed by Grade 12 learners in their response to final examination questions in the context of South African schools in the Gauteng Province Kakoma Luneta Zwelithini Dhlamini
		SP E5 Room 1	SP E5 Room 2	SP E5 Room 3	SP E5 Room 4	SP C5 G05	SP C5 G06	SP C5 G07	SP C7 Delarey Hall
Regional Meetings	16:00-16:30	Tea and coffee: C5							Sponsored by Sharp
	16:30-18:00	AMESA Regional Meetings							
		Eastern Cape C6 AG2	Free State C6 AG2	Gauteng C5 G05	KZN C6 215	Mpumalanga C6 239	Northern Cape C6 213	Limpopo C6 143	North West C5 G06
	18:30	Welcome Dinner: Voorhuis Dining Hall (J12)							

TUESDAY 26 JUNE 2012

Plenary

08:30 - 10:00	Plenary Address: Makhalanyaane Moeti An analysis of grade 12 learners' understanding of ogives Chair: Sipho Vilakazi Auditorium									
10:00 - 10:30	Tea and coffee: Foyer Auditorium								Sponsored by Sharp	
10:30 - 13:00	AMESA 18th ANNUAL GENERAL MEETING									
13:00 - 14:00	LUNCH: C5									
	FP	FP + IP	FP	GET	SP & FET	FET	FET	FET	FET	FET
14:00-16:00	Developing Head Start mathematics material for the CAPS Foundation Phase Agatha Lebethé WS C6 AG1	"Learning pathway for number in the early primary grades" Connie Skelton Macmillan MM C5 G05	Workshops about mental activities: Number Sense in Foundation Phase Corin Mathews Michele Alexander WS C6 AG2	The Answer Series: Mathematics (GET band) Preparing the foundation for FET Andrew Lewis MM C7 DELAREY HALL	Making the object of learning visible: Using card activities to teach functions Shadrack Moalosi Anancia Guvea Joseph Makunye Phumzile Mthiyane Connie Motsiri WS C6 215	Representatives from regions only Analysis of Grade 12 Mathematics Paper 1 Nico Govender R Govender WS C6 113	Manhattan worms - Using cricket commentary to draw graphs Kerryn Vollmer WS E3 G11	Solving simultaneous equations in context to illustrate the basics of mathematical modelling Ramesh Jeram WS C6 239	Proofs in Geometry and Trigonometry: Bringing back the old and looking at the relevance in today's classroom Douglas Schuster WS C6 115	Developing conjectures on how to derive formulae for total surface areas of platonic solids Sibawu Siyepu WS C6 213
	FP	GET & FET		FET						
	Mathematics Textbooks for Foundation Phase first time users Themba Tshongwe WS C6 AG1	"Solutions for all Mathematics" Connie Skelton Macmillan MM C5 G05		The Answer Series: Mathematics CAPS (FET band) with particular attention on Geometry Anne Eadie MM C7 DELAREY HALL						
16:00-16:30	Tea and coffee: C5									
16:30-18:00	Panel 1 (FP) Chair: Retha van Niekerk "The nature of the mathematics education that grade R to 3 teachers receive in South Africa in the 21 st century at South African Tertiary Institutes" Panel Members: Erna Lampen Adel Hartley PD E5 Room 1				Panel 2 (GET & FET) Chair: David Sekao "Effective implementation of Mathematics CAPS in the classroom" Panel Members: Mike Cameron Heather Collins Thembelihle Madondo PD E5 Room 2					
18:30	Jazz Evening: C6									

Panel Discussions

WEDNESDAY 27 JUNE 2012

Long and Short papers – Workshops – Projects – How I teach

	FP + IP	FP	GET, FET & TEd	GET & FET	IP & SP	FET	FET	SP & FET	SP & FET	GET & FET & TEd	FET
08:00 - 08:55	<p>Patterns, functions and Algebra in the South African Primary Mathematics Curriculum: Towards more detail for South African teachers</p> <p>Nicky Roberts LP C5 G05</p>	<p>Numicon - a multi-sensory approach to teaching mathematics</p>	<p>Writing for Pythagoras: Ethical issues</p> <p>Alwyn Olivier C6 213</p>	<p>Video clips and cell phones: VITALmaths in the palm of your hand</p> <p>Duncan Samson Marc Schäfer WS C6 AG1</p>	<p>Keeping up to date with Intermediate and Senior phase methods</p>	<p>Representatives from regions only</p> <p>Analysis of Grade 12 Mathematics Paper 2</p>	<p>Teachers can and do: Examining specialist teacher knowledge in the teaching of Secondary school Algebra</p> <p>Bruce Tobias LP C5 G06</p>	<p>CAPS and the calculator table functions</p> <p>Merrick James WS C7 Delarey Hall</p>	<p>How to use Geogebra to teach the theorem of Pythagoras</p>	<p>Searching for patterns in unstructured text</p> <p>David Thomas SP C5 G07</p>	<p>Exploring learner understanding of mathematics using concept maps</p> <p>Tumisang Mokgothu Thapelo Mamiala SP C6 115</p>
										<p>GET & FET & TEd</p>	<p>FET</p>
										<p>Using adapted lesson study to facilitate mathematics teachers' meta-cognitive thinking skills (SANPAD Project)</p> <p>Marthie Van der Walt Maarten Dolk Jacob Molepo Joany Fransman Barbara Posthuma Temba Saziwa Nadia Esterhuysen Simon Tachie Hannelie du Preez Anja Human Annalie Roux Project C5 G07</p>	<p>A mathematical investigation into juggling</p> <p>Charles Bradshaw HIT C6 115</p>
09:00 – 09:55	<p>A comparison of the old (RNCS) and the new mathematics curriculum (CAPS) for the Foundation Phase and what teachers need to do</p> <p>Freda Africa Ed Chantler WS C6 239</p>	<p>Magda Scheepers LP C6 AG2</p>	<p>Discovering probability (chance) in the GET classroom</p> <p>Lucia Janse van Rensburg Desiree Timmet WS C6 213</p>	<p>Calcudoku - The new addictive number puzzle</p> <p>Duncan Samson WS C6 AG1</p>	<p>Micky Lavery WS C6 215</p>	<p>Nico Govender R Govender WS C6 G45</p>	<p>The JET-SAMF-AMESA Problem Solving course for teachers</p> <p>Alwyn Olivier IG C6 132</p>	<p>The benefits of natural textbook display calculators in the Maths Literacy classroom</p> <p>Astrid Scheiber WS C6 143</p>	<p>Cerenus Pfeiffer WS E3 G11</p>	<p>Maths core or Maths Lit: A talk to Grade 9 Parents</p> <p>Andrew Gilfillan HIT C7 Delarey Hall</p>	<p>How we teach graphing of parabolas in a less resourced Grade 11 class</p> <p>Michael Mhlole Mzikayise Mani HIT C6 115</p>

WEDNESDAY 27 JUNE 2012

Plenary - Projects - Interest Groups - Workshops - How I teach

10:00-11:00	Curriculum Phase Committees	South African Mathematics Olympiad (SAMO) SAMF	National Mathematics Week	Mathematics Teacher Education	Harmony Teacher Development Course (HTD) SAMF	↓	FET How to set a CAPS exam paper Andrew Gilfillan WS C6 143	FET An introduction lesson to Trigonometry with Geogebra Cerenus Pfeiffer WS E3 G11	↓	FET Centre of mass of polygons and other shapes Shan Pillay HIT C6 2 15
	Interest Groups FP C6 132 IP C6 213 SP C6 239 FET C7 Delarey Hall	IG C6 135	IG C6 AG1	IG C2 AG2	IG C6 119					FET How to teach the concept of gradient in a Grade 11 class Nyameka Kangela Xoliswa Mbelani HIT C6 115
11:00-11:30	Tea and coffee: Auditorium									Sponsored by Sharp
11:30-13:00	<p>Plenary address: Johann Engelbrecht (SAMS) Minding the gap between secondary and university mathematics</p> <p>Chair: Gilbert Groenewald</p> <p>Auditorium</p>									
13:00-14:00	Lunch: C5									
14:00-17:00	Excursions				Learning experiences for mathematics educators					
18:00	Cultural Evening: Main Hall C6									

THURSDAY 28 JUNE 2012

Discussions with plenary speakers - Long and Short papers - How I teach

	FP	IP	IP & SP	FET & HE	FET	FET	FET	TEd	TEd
08:30-09:25	Analyzing the relationship between conceptual and procedural knowledge in a departmentally provided numeracy work book Olivia Kaulinge LP C5 G07	The pedagogical use of ICTs for Grade 8 mathematics in South African schools Verona Cassim Seugnet Blignaut Hercules Nieuwoudt Christo Els LP E5 Room1	Long division: In search of the primary school mathematics holy grail Nicky Roberts LP C7 Delarey Hall	Visualising "imaginary" zeroes of polynomials and other functions Johann Engelbrecht LP C6 143	Mathematics teaching challenges in the Secondary schools of the Eastern Cape Province: A teacher's perspective Prince Jaca Pragashni Padayachee LP C5 G05	Using a context-based problem solving instruction to promote social justice in high school mathematics classrooms Joseph Dhlamini David Mogari LP E5 Room 4	A discussion of references of cancellation in the mathematical work of a Grade 10 student Zain Davis SP C5 G06	Application of Transformation Geometry: the study of reflective properties of conic sections Avhasei Tsanwani LP E5 Room 2	Factors which promote mathematics teaching as a career: Reflections of pre-service students Nico Govender LP E5 Room 3
09:30 - 10:00	Discussion with Tim Rowland DPS C6 132	SP	SP	The pirate method: A simple strategy for working with conversions, rates and other direct relationships Andrew Gilfillan HIT C5 G06	Discussion with Johann Engelbrecht DPS C6 143	The Mathlete project Laurie Butgereit HIT G5 G05	Discussion with Cyril Julie DPS C6 215	Discussion with Makhalanyne Moeti DPS C6 115	GET & FET
		How I teach number patterns in a Grade 9 class Wandile Hlaleleni HIT C7 Delarey Hall	Bringing context to mathematical problems in the classroom Bruce Tobias HIT C5 G07						
10:00 - 10:30	Tea and coffee: Auditorium								Sponsored by Sharp
10:30 - 12:00	Plenary address: Cyril Julie The primacy of teaching procedures in school mathematics Chair: Alwyn Olivier Auditorium								
12:00-13:00	Closing Ceremony Auditorium								
13:00 - 14:00	Lunch: C5								