



AIMS

African Institute for
Mathematical Sciences
CAMEROON



VolkswagenStiftung

U N I K A S S E L
V E R S I T Ä T

AIMS-VOLKSWAGEN STIFTUNG WORKSHOP ON INTRODUCTION TO COMPUTER ALGEBRA AND APPLICATIONS
Douala, Cameroon, October 6-13, 2017

PROGRAM

Time slots	Day 1-Preliminary Training Session Friday 06, 2017	Day 2-Preliminary Training Session Saturday 07, 2017	Sunday 08, 2017	Day 1 Workshop Monday 09.10	Day 2 Workshop Tuesday 10.10	Day 3 Workshop Wednesday 11.10	Day 4 Workshop Thursday 12.10	Day 5 Workshop Friday 13.10
08:30-09:30	Preliminary Training 1 Koepf: Introduction to Maxima	Preliminary Training 7 Ocansey: Introduction to SAGE	Free	Plenary Talk 1 Buchberger: Algorithms and Algorithmic Proving in Mathematica I	Plenary Talk 10 Eick: Algorithms for Permutation Groups	Plenary Talk 19 Regensburger: Symbolic Computation with Integro-Differential Operators	Plenary Talk 23 Guenda: Application of Algebra in Information Theory	Plenary Talk 33 Foupouagnigni: Computer Algebra as a Tool for Derivation of Some Properties for Orthogonal Polynomials on Nonuniform Lattices
09:30-10:30	Preliminary Training 2 Atalaye / Tetsing: Introduction to GAP	Preliminary Training 8 Koepf: Programming with Maxima	Free	Plenary Talk 2 Koepf: Solving in Computer Algebra	Plenary Talk 11 Regensburger: Symbolic Computation with Differential Operators	Plenary Talk 20 Kreuzer: Solving Polynomial Systems Using Linear Algebra II	Plenary Talk 24 Eick: Classification of Groups of 'Small' Order	Plenary Talk 34 Koepf: Algorithmic Summation
10:30-11:00	Coffee Break	Coffee Break	Free	Coffee Break	Coffee Break	Coffee Break	Coffee Break	Coffee Break
11:00-12:00	Preliminary Tutorial 3 Koepf: Introduction to Maxima	Preliminary Tutorial 9 Ocansey: Introduction to SAGE	Free	Plenary Talk 3 Kreuzer: Solving Polynomial Systems Using Linear Algebra I	Plenary Talk 12 Buchberger: Algorithms and Algorithmic Proving in Mathematica II	Tutorial Session 21 Regensburger: Symbolic Computation with Integro- Differential Operators	Tutorial Session 25 Kreuzer: Solving Polynomial Systems Using Linear Algebra II	Tutorial Session 35 Foupouagnigni / Koepf
12:00-13:00	Preliminary Tutorial 4 Atalaye / Tetsing: Introduction to GAP	Preliminary Tutorial 10 Koepf: Programming with Maxima	Free	Tutorial Session 4 Buchberger: Algorithms and Algorithmic Proving in Mathematica I	Tutorial Session 13 Eick: Algorithms for Permutation Groups	Question and Answer Session 22	Tutorial Session 26 Guenda: Application of Algebra in Information Theory	Closing Ceremony & Lunch
13:00-14:30	Lunch break	Lunch break	Free	Lunch break	Lunch break	Lunch Break	Lunch break	Departure
14:30-15:30	Preliminary Training 5 Abbott: Introduction to CoCoA	Preliminary Training 11 Messeng: Introduction to ApCoCoA	Free	Tutorial Session 5 Koepf: Solving in Computer Algebra	Tutorial Session 14 Regensburger: Symbolic Computation with Differential Operators	Social event	Tutorial Session 27 Eick: Classification of Groups of 'Small' Order	Departure
15:30-16:30	Preliminary Tutorial 6 Abbott: Introduction to CoCoA	Preliminary Tutorial 12 Messeng: Introduction to ApCoCoA	Free	Tutorial Session 6 Kreuzer: Solving Polynomial Systems Using Linear Algebra I	Tutorial Session 15 Buchberger: Algorithms and Algorithmic Proving in Mathematica II	Social Event	Contributed Talk 28 Thierry Nsabimana (Benin): Detection and prevention of criminals attack in cloud computing using an hybrid Intrusion Detection Systems	Departure
							Contributed Talk 29 Gilda Rech Bansimba (Congo): Elliptic Curve Cryptography	
							Contributed Talk 30 Jean Juste Harrison	



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							Bashingwa (South Africa): Symmetry, reductions and exact solutions of a second order system of difference equations	
16:30-17:00			Free	Coffee Break	Coffee Break	Social Event	Coffee Break	
17:00-17:20	Free time slot for practice	Free time slot for practice	Free	Contributed Talk 7 Gassan Farah (Senegal): Non-diagonal systems and their simulations using exponential time differencing methods	Contributed Talk 16 Michael Eni Oluwafe (Nigeria): Counting Subgroups for a Class of Finite Minimal Nonabelian p-groups all of whose Generating Elements have the same order	Social Event	Contributed Talk 31 Bernard Nyaare (Kenya): Implicitization of hypersurfaces via predicted support	
17:20-17:40	Free time slot for practice	Free time slot for practice	Free	Contributed Talk 8 Oumar Ali Kelo (Chad): Use of Computer Algebra to teach mathematics	Contributed Talk 17 Andre Saint Eudes Mialebama Bouesso (Congo and South Africa); Strong Groebner bases over the dual valuation domain and some applications		Question and Answer Session 32	
17:40-18:00	Free time slot for practice	Free time slot for practice	Free	Contributed Talk 9 Mohamed Mabrouk (Tunisia): Linearization coefficient for some basic hypergeometric polynomials	Contributed Talk 18 Dereje Kifle Boku (Ethiopia): Groebner Bases over algebraic number fields			
19:30-22:00			Free			Conference Dinner		