

**DRAFT PROGRAMME OUTLINE OF THE CONFERENCE ON MATHEMATICS
AND ITS APPLICATIONS**

Date: 28th August 2022 to 1st September 2022

Arrival: 28th August 2022

Activity		Lead/Responsible
Arrival and Pick-Up		MJ Grand Hotel Pick-Up Team/Seth Obeng
Day 1: Monday, 29th August 2022		
7:30am	Breakfast	
08:00am	Registration	
Session 1: Chair: Antoine Bogso		
9:00am	Plenary Talk 1: "A journey through recurrent motions"	William Obeng Denteh
10:00am	Talk 1: "On certain applications of beta function in geometry functions theory"	Matthew Olanrewaju Oluwayemi
10:30am	Coffee Break	
Session 2: Chair: Olivier Menoukeu Pamen		
11:00am	Talk 2: "Mathematical assessment of the impact of imperfect vaccination and population turnover on infectious disease dynamics"	Hetsron Legrace Nyandjo Bamen
11:30am	Opening of Conference	Guest: Hon. Dr. John Ampontuah Kumah, Dep. Minister for Finance, Ghana
12:30pm	Lunch Break	
Session 3: Chair: Kwabena Doku-Amponsah		
2:00pm	Plenary Talk 2: "Stochastic Fokker-Planck PIDE for conditional McKean-Vlasov jump diffusions and applications to optimal control"	Bernt Oksendal
3:00pm	Talk 3: "Numerical algorithm as Multi-Order Differential Equations Solver"	Olayemi Olaneg
3:30pm	Coffee Break	
Session 4: Chair: Rev. William Obeng-Denteh		
4:00pm	Talk 4: "Connected induced subgraphs in n-vertex graphs and unicyclic graphs"	Audace Dossou-Olory



4:30pm	Talk 5: "Deformation retract of the group of symplectomorphisms"	Djideme Franck Houenou
5:00pm	Discussion	
6:00pm	Dinner	
Day 2: Tuesday, 30th August 2022		
7:30 am	Breakfast	
Session 1: Chair: Ralf Wunderlich		
9:00am	Plenary Talk 3: "From little BMO to product BMO through multiplication operator"	Benoit Sehba
10:00am	Talk 6: "Optimisation of consumption with labour income under Epstein-Zin utility"	Donatien Kuissi Kamdem
10:30am	Coffee Break	
Session 2: Chair: Moustapha Dieye		
11:00am	Plenary Talk 4: "Reflected BSDEs associated to jump Markov processes and application to PDEs"	Youssef Ouknine
12:00pm	Talk 7: "Stochastic Optimal Control of thermal energy storage"	Paul Honore Takam
12:30pm	Lunch Break	
Session 3: Chair: Benoit Sehba		
2:00pm	Plenary Talk 5: "Double continuation regions for American options"	Zbigniew Palmowski
3:00pm	Talk 8: "Quantum Levy processes on the compact quantum group $SU_q(2)$ "	Latevi Lawson
3:30pm	Coffee Break	
Session 4: Chair: Latevi Lawson		
4:00pm	Talk 9: "Strong convergence of the Euler-Maruyama approximation for SDEs with unbounded drifts"	Moustapha Dieye
4:30pm	Talk 10: "Diffraction effects on ultrasonic flows meters for gas flow at high flow rates: Modeling and Analysis"	Daudel Tchatat Ngaha
5:00pm	Discussion	
6:00pm	Dinner	
Day 3: Wednesday, 31st August 2022		
7:30am	Breakfast	
Session 1: Chair: Youssef Ouknine		



9:00am	Plenary Talk 6: "Geometric properties of some rough Weierstrass and Takagi type"	Peter Imkeller
10:00am	Talk 11: "Differentiability of Quadratic Forward-Backward SDEs with rough drift"	Rhoss Likibi Pellat
10:30	Coffee Break	
Session 2: Chair: Peter Imkeller		
11:00am	Plenary Talk 7 "A regression method estimation of the extreme value index using decreasing dependent random weights"	Kwabena Doku-Amponsah
12:00pm	Talk 12: "Representation theory and D-modules theory"	Ibrahim Nonkane
12:30pm	Lunch Break	
1:30pm	Trip to AIMS Ghana Campus	
Session 3: Chair: Olivier Menoukeu Pamen		
3:00pm	Plenary Talk 8: "Asymptotic approximations of Good's special functions arising in atomic physics"	David Bekolle
4:00pm	Coffee Break	
4:30pm	Poster Presentation	
5:30pm	Trip Back to Hotel	
6:00pm	Dinner	
Day 4: Thursday, 1st September 2022		
Session 1: Chair: Zbigniew Palmowski		
9:00am	Plenary Talk 9: "Stochastic Epidemic Models with Partial Information and Dark Figure Estimation"	Ralf Wunderlich
10:00am	Talk 13: "On approximate numerical solution to a class of PIDEs from mean-variance asset allocation problems under contagion"	Edward Korveh
10:30	Coffee Break	
Session 2: Chair: David Bekolle		
11:00am	Plenary Talk 10: "Path-by-path uniqueness of SDEs in the plane with irregular drifts"	Antoine Bogso
12:00pm	Plenary Talk 11: "On the Non-Newtonian Calculus of Variations"	Delfim F. M. Torres
1:00pm	Lunch Break	
2:00pm	Closing Ceremony	

