



Recent Developments in PDEs and Applications

March 16 & 17, 2022

Virtual Event

Organized by Department of Mathematics

Event Schedule (KSA time)

Wednesday March 16, 2022

Morning Session



8:30-8:45

Opening Ceremony

Adel Fadhl Ahmed

Dean, College of Computing and Mathematics, KFUPM



8:50-9:40

“Isotropic and anisotropic equations with unbalanced growth”

Vicentiu Radulescu

University of Craiova (Romania)



9:45-10:20

“Boundary Layer separation”

Tej-Eddine Ghouli

NYU Abu Dhabi (UAE)



10:25-11:15

“Global behavior of solutions to damped nonlinear wave equations with structural damping”

Varga Kalantarov

Koc University (Turkey)



11:20-11:55

“Blow-up of solutions to semilinear wave equations with a time-dependent strong Damping”

Ahmad Fino

Lebanese University (Lebanon)

Wednesday March 16, 2022

Afternoon Session



13:00-13:50

“Decay of solutions in strain gradient MGT thermoelasticity”

Ramon Quintanilla

Universitat Politècnica de Catalunya (Spain)



13:55-14:25

“Circulant preconditioners for the biharmonic problem”

Faisal Fairag

KFUPM (Saudi Arabia)



14:30-15:15

"On the Moore-Gibson-Thompson equation with nonconvex memory kernels"

Monica Conti

Politecnico di Milan (Italy)



15:50-16:40

"General symmetry multi-reduction method for partial differential equations with conservation laws"

Stephen Anco

Brock University (Canada)



16:45-17:35

"A general blow-up result for degenerate hyperbolic inequalities in an exterior domain"

Bessem Samet

King Saud University (Saudi Arabia)

Thursday March 17, 2022

Morning Session



8:10-8:50

"Some decay results on the Moore-Gibson-Thompson equation with memory arising in high intensity ultrasound"

Wenjun Liu

NUIST (China)



8:55-9:25

"A recent proof of the existence of an inertial manifold for the hyperbolic Cahn-Hilliard equation"

Ahmed Bonfoh

KFUPM (Saudi Arabia)



9:30-10:00

"Numerical method for diffuse interface model with application to two-phase flows"

Abdullah Shah

COMSATS University Islamabad (Pakistan)



10:05-10:55

"Dirichlet problem for critical 2D Quasi-geostrophic equation with large data"

Tomasz Dłotko

University of Silesia in Katowice (Poland)

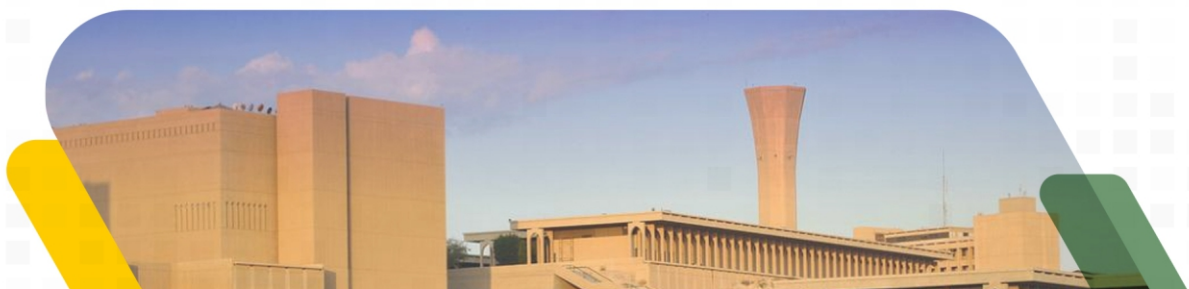


11:00-11:50

"Schwarz boundary value problem for partial differential equations in complex plane"

Okay Celebi


Yeditepe University (Turkey)



Thursday March 17, 2022

Afternoon Session



 **13:30-14:10**

"On Keller-Segel type models in higher dimensions"

Suleyman Ulusoy

AURAK (UAE)



 **14:15-15:05**

"Some recent results in Nutrient Dynamics and Brain Cancer"

Stefania Gatti

Università di Modena e Reggio Emilia (Italy)



 **15:40-16:20**

"Dynamics of locally damped semilinear Bresse systems"

To Fu Ma

Universidade de Brasilia (Brazil)




 **16:25-17:05**

"Extensible beams with Balakrishnan-Taylor damping coefficient: intrinsic polynomial behavior and long-time dynamics"

Marcio A. Jorge Silva

Universidade Estadual de Londrina (Brazil)



 **17:10-17:50**

"Multicontinuum models for porous media flows and applications"

Yalchin Efendiev

Texas A&M University (USA)

 **17:55-18:00**

Closing ceremony





Symposium

Recent Developments in PDEs and Applications



Speakers



Okay Celebi

Yeditepe University, Department of Mathematics, Turkey



Varga Kalantarov

Koc University, Department of Mathematics, Turkey



Tomasz Dlotko

University of Silesia in Katowice, Institute of Mathematics, Poland



Monica Conti

Politecnico di Milano, Dipartimento di Matematica 'Francesco Brioschi', Italy



To Fu Ma

Universidade de Brasilia, Departamento de Matematica, Brazil



Stephen Anco

Brock University, Department of Mathematics and Statistics, Canada



Bessem Samet

King Saud University, Mathematics Department, Saudi Arabia



Stefania Gatti

Universita degli Studi di Modena e Reggio Emilia, Dipartimento di Matematica Dipartimento di Scienze Fisiche, Informatiche e Matematiche, Italy





Ramon Quintanilla

Universitat Politècnica de Catalunya, Departament Matemàtica Aplicada II, Spain



Vicentiu Radulescu

University of Craiova, Institute of Mathematics of the Romanian Academy, Romania & AGH University of Science and Technology, Poland



Ahmad Fino

Lebanese University, Department of Mathematics, Lebanon



Ahmed Bonfah

KFUPM, Department of Mathematics, Saudi Arabia



Suleyman Ulusoy

American University of Ras Al Khaimah, Department of Mathematics & Natural Sciences, UAE



Tej-Eddine Ghouli

New York University Abu Dhabi, Research Institute, UAE



Abdullah Shah

COMSATS University Islamabad, Department of Mathematics, Pakistan



Marcio A. Jorge Silva

Universidade Estadual de Londrina, Departamento de Matemática, Brazil



Wenjun Liu

School of Mathematics and Statistics, Nanjing University of Information Science and Technology, China



Faisal Fairag

KFUPM, Department of Mathematics, Saudi Arabia



Yalchin Efendiev

Texas A & M University, Department of Mathematics, USA