

MS13: Approximation methods, functional equations and applications **Organizers:** Dajana Conte, Eduardo Cuesta, Maria Carmela De Bonis and Donatella Occorsio

Part I - Monday, August 28th

Time	Speaker	Name of the talk
15:45-16:10	Iulia Martina Bulai	Bistability of a mathematical model for the control of an olive tree disease
16:10-16:35	Domenico Mezzanotte	Numerical methods over equispaced grids
16:35-17:00	Eduardo Cuesta Montero	Non local equations for image restoration: Space scale properties of the continuous and discrete approach with practical illustrations
17:00-17:25	Antonella Iuliano	A network-constrain Weibull AFT model based on proximal gradient descent method
17:25-17:50	Luisa Fermo	A Nyström-type method for Volterra integral equations based on equispaced nodes
17:50-18:15	Mario Pezzella	Conservative Multistep Methods for Production-Destruction Differential Systems
18:15-18:40	Gianluca Frasca Caccia	Fast Solvers for a Phase Field Corrosion Model
18:40-19:05	Pasquale De Luca	Solving numerical problems arising in environmental modeling through parallel strategies

Part II - Tuesday, August 29th

Time	Speaker	Name of the talk
15:45-16:10	Carmine Valentino	A CUDA implementation for solving systems of Volterra Integral Equations
16:10-16:35	Federico Nudo	Improved methods for the enrichment and analysis of the simplicial vector-valued linear finite elements
16:35-17:00	Concetta Laurita	On the numerical solution of some Volterra integral equations reformulating metastatic tumor growth models with treatment
17:00-17:25	Giuliana Ramella	Resolution Approximation Methods for Image Processing Applications
17:25-17:50	Anna Lucia Laguardia	A Nyström method for Hammerstein integral equations on a closed interval
17:50-18:15	Giovanni Pagano	Adapted numerical treatment of stiff PDEs models from applications
18:15-18:40	Patricia Diaz de Alba	Analytical and numerical preservation properties of a modified SIR model with contact matrix: application to the diffusion of information