



# The f(A)bulous workshop on matrix functions and exponential integrators

## Monday, September 25, 2023

**Invited talks: Krylov subspaces** - Main/groundfloor-V0.05/2+3 - Prigogine (9:45 AM - 10:30 AM)

-Conveners: Marcel Schweitzer

time	[id] title	presenter
9:45 AM	[20] Limited memory polynomial Krylov subspace methods for matrix functions	FROMMER, Andreas

**Invited talks: Network science** - Main/groundfloor-V0.05/2+3 - Prigogine (1:45 PM - 2:30 PM)

-Conveners: Thomas Mach

time	[id] title	presenter
1:45 PM	[17] f(A)bulous networks: an overview of matrix functions in network science	ARRIGO, Francesca

# Tuesday, September 26, 2023

## Invited talks: Exponential integration - Main/groundfloor-V0.05/2+3 - Prigogine (9:00 AM - 10:30 AM)

-Conveners: Stéphane Gaudreault

time	[id] title	presenter
9:00 AM	[21] The joys and challenges of exponential integration	TOKMAN, Mayya
9:45 AM	[7] The $\varphi(A)$ bulous matrix $\times$ functions in exponential integrators for problems with Kronecker structure	CALIARI, Marco

## Invited talks: $f(A)$ scinating applications - Main/groundfloor-V0.05/2+3 - Prigogine (1:30 PM - 3:00 PM)

-Conveners: Patrick Kürschner

time	[id] title	presenter
1:30 PM	[10] Understanding tensor and tensor decompositions with application to the chemical master equation	SIDJE, Roger
2:15 PM	[19] $f(A)$ bulous ladder networks: From "rigorous" computation of $b^{\exp(tA)}$ to learning $f(A)$ with unknown $A$	DRUSKIN, Vladimir

# Wednesday, September 27, 2023

## Invited talks: Graphs and networks - Main/groundfloor-V0.05/2+3 - Prigogine (9:00 AM - 10:30 AM)

-Conveners: Marcel Schweitzer

time	[id] title	presenter
9:00 AM	[15] Computational graphs for matrix functions	FASI, Massimiliano
9:45 AM	[18] Estimating the von Neumann entropy of large matrices	BENZI, Michele