# Sabrine Chebbi

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Place of birth: Tunis, Tunisia \* Date of birth: 24-07-1991

#### Education and Academic Positions

## CNRS Researcher at CRIStA

Inria, Lille 2024-current

Project title: Robust non parametric bandit algorithm

Collaborators: Emilie Kaufmann

#### Postdoc

University of Tubingen collaboration with AIMS, South Africa 2022-2024

Project title: Multi-armed Bandit, Theory and Application in Communication Networks

Collaborators: Setarah Maghsudi, Bubacarr bah

#### Postdoc

Institute of Mathematics of the Czech Academy of Sciences September 2022- November 2022

Project title: Fluid-structure interaction

Collaborators: Sárka Nečasová, Václav Mácha

# PhD's degree in Mathematical

Faculty of Sciences of Tunis.

2016-2020

Thesis title: Asymptotic behavior and optimality of the energy of certain Timoshenko systems.

Obtained with highest honors

PhD supervisors: Ahmed Bchatnia and Makram Hamouda.

Best thesis Awards for Tunisian women in pure mathematics

# Master's degree in Mathematical Modelling and Scientific Computing (MSC)

National Engineers School of Tunis.

2014-2016

Thesis title: Lower energy estimates for Timoshenko system and Petrowski equation.

## Bachelor's degree in Pure Mathematics

The Faculty of Sciences of Tunis

2010-2014

Final grade: 60/60, Top 5

#### Publications

- Bubacarr Bah, Sabrine Chebbi, Makram Hamouda and Joseph Muthui Wacira, *Physics-informed neural networks for Timoshenko system with thermoelasticity* preprint https://arxiv.org/abs/2409.15872
- Sabrine Chebbi, Václav Mácha, Šárka Nečasová "Analysis of a system modelling the interaction between the motion of a spring and a viscous gas", Annals of Pure and Applied Mathematics, Submitted on 20 Apr 2023.
- Bchatnia, A., Chebbi, S. Hamouda, M. Nonlinear damping effects for the 2D Mindlin–Timoshenko system. Arab. J. Math. 13, 485–512 (2024).
- Sabrine Chebbi, Makram Hamouda" Discrete energy behavior of a damped Timoshenko system" March 2020, Computational and Applied Mathematics (39).

• Ahmed Bchatnia, Sabrine Chebbi, Makram Hamouda, Abdelaziz Soufyane "Lower Bound and optimality for a nonlinearly damped Timoshenko system with thermoelasticity" March 2019, Asymptotic Analysis 114(1-2):73-91.

# Teaching Experiences

- 2022-2023: Engage in the AI for Science new Master's program https://ai.aims.ac.za/ selection process at AIMS by assisting in reviewing applications and contributing to the creation of a shortlist.
- 2020-2021: Teaching assistant at University of Tunis El Manar, Faculty of Sciences of Tunis, Integration.
- 2020-2021: Teaching assistant at Free University of Tunis, Descriptive statistics.
- 2019-2020: Teaching assistant at University of Science of Tunis Probability, Complex Analysis.
- 2018-2019: Teaching at University of Carthage, School of Statistics and Information Analysis, Tunis, Calculus of variations, Differential calculation and convex optimization
- 2017-2018: Teaching at University of Carthage, School of Statistics and Information Analysis, Tunis, Calculus of variations

## Selected Seminars and Talks

- Attended to the Summer school and workshop "Stochastic in Fluids", held in Prague on August 21-25, 2023 and participated in poster session "Analysis of a system modeling the interaction between the motion of a spring and viscous gaz".
- Participated in the Kick-Off-Meeting heiAIMS Heidelberg, July 10-12, 2023 with the AIMS member and I presented a scope about my research activities. (find attached the Info-Sheet-Kick Off heiAIMS23).
- Participated in AI Center Inaugural symposium poster session on 18th July 2023
- 23 March 2023: Attending the workshop "Women in Mathematics and its Applications Research Day" at AIMS, South Africa with presentation (find attached the program and the abstract of my talk )
- Organize" the IWR-AIMS International Mathematics Day activity at AIMS" as a collaboration with the Heidelberg University
- Online participation in The CIMPA school on Mathematical and Statistical Methods for Data Science that will be held at AIMS Cape Town. https://aims.ac.za/event/cimpa-school-mathematical-and-statistical-methods-for-data-science/
- Attend to Winter School on Control, Stability and Singularity Formation in Nonlinear PDEsHammamet, December 12-15, 2022, http://www.tms.rnu.tn/cv/cssf2022.pdf
- WORKSHOP "AGAINST THE FLOW" Bedlewo, (October 18-22,2022).
- Member of organizing committee of mathematic PhD Seminar at the Faculty of sciences of Tunis, Department of Mathematics, (2018-2019)
- Seminar at University of Amiens, France. (2019)
- Participated in CIMPA School at Hammamet, (Tunis), "Control, Inverse Problem and Geometry"
- Participated in 23rd SMT CSMT (2018) Symposium in Tabarka, (Tunis).

- Attended to the international Conference ICAAM on Advances in Applied Mathematic and presented on oral contribution sousse, Tunis (2018).
- Seminar at University of Amiens, France. Attended to the Workshop "The REELCOOP EU-ROSUNMED joint Workshop "Renewable Electricity Generation: contribution and demonstrations".(2018)
- Attended the Workshop "Career Building Workshops for STEM Scientists", (2017). (Tunis).
- Participated in the Summer School, proposed by the EDP laboratory at the Faculty of Sciences of Tunis El Manar. (Tunis), (2017).
- Participated in Summer School in Sinaia, Roumania (2017). University Bucharest. Title: "Modeling of crystal deformation Self-similar processes.

## Research visits

- May-Jullet 2018: Visiting researcher (2 months) at Picardie Jules Verne University.
- Juin-Augest 2019: Visiting researcher (2 months) at Picardie Jules Verne University.
- April 2022: Visiting researcher (2 Weeks) at the Institute of Mathematics of the Academy of Sciences of the Czech Republic.
- September-November 2022: Visiting researcher (3 months) at the Institute of Mathematics of the Academy of Sciences of the Czech Republic.

#### **SKILLS**

Programming Languages/Tools Arabic English French German	Matlab, Python and Freefem++., LATEX Native Speaking, reading and writing. Fluently beginner.
	References

- Departement of Mathematic, Faculty of Sciences, Tunis. mahamoud@indiana.edu
- Departement of Mathematic, Faculty of Sciences, Tunis. ahmed.bchatnia@fst.utm.tn
- The Institute of Mathematics of the Academy of Sciences of the Czech Republic, matus@math.cas.cz
- AIMS, South Africa, bubacarr@aims.ac.za