Sabrine Chebbi

Residence/domicile: 13, Heuberger-Tor-Weg, 72076 Tübingen

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

Education and Academic Positions

Postdoc Follow Researcher in Reinforcement Learning

University of Tubingen collaboration with AIMS, South Africa   *2022-2024*
Project title: Multi-armed Bandit, Theory and Application in Communication Networks
Collaborators: Prof.Setarah Maghsudi, Prof. Bubacarr bah

Visiting Researcher

Institute of Mathematics of the Czech Academy of Sciences   *September 2022- November 2022*
Project title: Fluid–structure interaction
Collaborators: Prof. Sarka Necasova, Prof. 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 : Prof. Ahmed Bchatnia and Prof. 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

- Sabrine Chebbi *"Physics-informed neural networks for solving and capturing the Energy behavior of Timoshenko system with thermoelasticity"*, In preparation.

- 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.

- Ahmed Bchatnia, Sabrine Chebbi, Makram Hamouda, *" Upper Bounds for a nonlinearly damped 2D Mindlin-Timoshenko system"*.Preprint, May 2021.

- 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

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- **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

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- 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 – EUROSUNMED 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.

SKILLS

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

References

- Departement of Mathematic, Faculty of Sciences, Tunis. mahamoud@indiana.edu

- Departement of Mathematic, Faculty of Sciences, Tunis. ahmed.bchatnia@fst.utm.tn