

▼ **INTERESTS** · Probabilities & Statistics · Functional Analysis · Theory of Operators · Spectral Analysis · Linear Algebra · Python & R · Numerical Analysis

01. Education

- 2017 – 2020 **Doctor of Mathematics**
Faculty of Sciences of Sfax (FSS) — University of Sfax
Topic : Generalized weakly demicompact operators
Supervisor : Prof. Bilel Krichen
Reviewers : Prof. El Hassan Zerouali & Prof. Mohamed Ali Hammami
- 2012 – 2014 **M.Sc. Research in Mathematics**
Faculty of Sciences of Monastir — University of Monastir
Topic : Multifractal analysis of branching random walks in $\mathbb{R}^d$
Supervisor : Prof. Imen Bhourri
- 2008 – 2011 **B.Sc. in Mathematics**
Faculty of Sciences of Monastir — University of Monastir
- 2006 – 2007 **Baccalauréat in Mathematics**
Tunisia

EDUCATION

02. Professional Experiences

- 2025 – 2026 **Contract Assistant Professor**
Higher Institute of Medical Technologies of Tunis (ISTMT) — University of Tunis El Manar
- 2024 – 2025 **Part-time Teacher**
Private School of Engineering and Technology (ESPRIT)
- 2023 – 2024 **Part-time Teacher**
Private Higher School of Technology and Engineering (TEK-UP)
- 2021 – 2023 **Contract Assistant Professor**
National Engineering School of Tunis (ENIT) — University of Tunis El Manar
- 2020 – 2021 **Contract Assistant Professor**
Higher Institute of Informatics and Mathematics of Monastir (ISIMM) — University of Monastir
- 2019 – 2020 **Part-time Teacher**
Faculty of Sciences of Sfax (FSS) — University of Sfax

POSITIONS

03. Accepted & Published Articles

13. I. Ferjani, M. Beghdadi & B. Krichen, *On left-right $\bar{\gamma}$ - ε -condition pseudospectrum*, *Kragujevac Journal of Mathematics*, 51(5):887–899, 2027.
12. I. Ferjani, *The class of order L -weakly and order M -weakly demicompact operators*, *Journal of Mathematical Sciences*, 2026. DOI: [10.1007/s10958-026-08549-2](https://doi.org/10.1007/s10958-026-08549-2)
11. I. Ferjani, *Characterization and numerical simulations of relative generalized weak demicompact operators*, *Computational and Applied Mathematics*, 484:117462, 2026. DOI: [10.1016/j.cam.2026.117462](https://doi.org/10.1016/j.cam.2026.117462)
10. I. Ferjani, *On the Class of p - M -Weakly Demicompact Operators with Numerical Application*, *Bol. Soc. Paran. Mat.*, 43(5):1–15, 2026. DOI: [10.5269/bspm.78937](https://doi.org/10.5269/bspm.78937)
9. I. Ferjani, *Generalized weak demicompactness via perturbation and coperturbation functions*, *Advanced Studies Euro-Tbilisi Mathematical Journal*, 18(1):111–120, 2025. DOI: [10.32513/asetmj/1932200825007](https://doi.org/10.32513/asetmj/1932200825007)
8. I. Ferjani, O. Kchaou & B. Krichen, *Generalized essential spectra involving the class of g - g -Riesz operators*, *Georgian Mathematical Journal*, 2024. DOI: [10.1515/gmj-2024-2002](https://doi.org/10.1515/gmj-2024-2002)
7. I. Ferjani & B. Krichen, *The class of p -demicompact operators on lattice normed spaces*, *Commun. Korean Math. Soc.*, 39(1):137–147, 2024. DOI: [10.4134/CKMS.c230116](https://doi.org/10.4134/CKMS.c230116)
6. R. Aydi, I. Ferjani & B. Krichen, *Index for generalized Fredholm operators and generalized perturbation theory*, *Georgian Mathematical Journal*, 30(4):493–507, 2023. DOI: [10.1515/gmj-2023-2021](https://doi.org/10.1515/gmj-2023-2021)
5. I. Ferjani, A. Jeribi & B. Krichen, *Generalized weak demicompactness involving measure of non-strict-singularity*, *IJPA*, 52(49):529–541, 2021. DOI: [10.1007/s13226-021-00055-2](https://doi.org/10.1007/s13226-021-00055-2)
4. I. Ferjani, A. Jeribi & B. Krichen, *Invariance of essential spectrum by means of generalized weak demicompactness*, *Operator Theory, De Gruyter*, pp. 115–120, 2021. DOI: [10.1515/9783110598193-008](https://doi.org/10.1515/9783110598193-008)
3. I. Ferjani, A. Jeribi & B. Krichen, *Spectral properties for generalized weakly S -demicompact operators*, *Linear and Multilinear Algebra*, pp. 1–19, 2020. DOI: [10.1080/03081087.2020.1737633](https://doi.org/10.1080/03081087.2020.1737633)
2. I. Ferjani, A. Jeribi & B. Krichen, *On Relative Essential Spectra of a 3×3 Operator Matrix involving Relative Generalized Weak Demicompactness*, *Filomat*, 34(13):4271–4286, 2020. DOI: [10.2298/FIL2013271F](https://doi.org/10.2298/FIL2013271F)
1. I. Ferjani, A. Jeribi & B. Krichen, *Spectral Properties Involving Generalized Weakly Demicompact Operators*, *Mediterranean Journal of Mathematics*, 16(30), 2019. DOI: [10.1007/s00009-019-1320-3](https://doi.org/10.1007/s00009-019-1320-3)

04. Submitted / In Progress Articles

- S1. *Characterizations of the γ -pseudo left-right Browder essential spectra involving Riesz perturbations* (with M. Beghdadi & B. Krichen)

S2. *Properties of order-demi quasi KB operators*

SUBMITTED

05. Conferences & Seminars

COMMUNICATIONS

6. **ICAOTA 2026** — Characterization of Relative Generalized Weak Demicompact Operators. *International Conference on Advances in Operator Theory and Applications*, Hammamet, 23–26 March 2026.

5. **ICOT 2025** — Extensions of Weak Demicompactness Through Measures of Non-Strict Singularity. *International Conference on Operator Theory*, Hammamet, 22–24 December 2025.

4. **ICOT 2023** — Characterization of generalized weak demicompactness. *International Conference on Operator Theory*, Sousse, 17–22 December 2023.

3. **ICAAM 2022** — Characterization of generalized weakly demicompact operator on Banach space. *International Conference on Advances in Applied Mathematics*, Djerba, 19–22 December 2022.

2. **ICAAM 2019** — Generalized weak demicompactness involving measures of non-strict-singularity. *International Conference on Advances in Applied Mathematics*, Hammamet, 15–19 December 2019.

1. **ICOT 2018** — Generalized weakly demicompact linear operators. *International Conference on Operator Theory*, Hammamet, 30 April – 3 May 2018.

CONFERENCES

SEMINARS & INTERNSHIPS

- **Seminar** — On Julia-type inequalities for operators. Camille Jordan Institute, working group "Operators' theory and complex analysis". 18 October 2018.

▫ **Research Internship** — Transfer Formulas and Julia Inequalities for Operators. Camille Jordan Institute (Lyon), with Prof. Gilles Cassier. Sept.–Oct. 2018.

06. Teaching

PERIOD	INSTITUTION	COURSES TAUGHT
2025–2026	ISTMT	Analysis (GBM 1 st year · Bachelor GBM 1 st year)
2024–2025	ESPRIT	Basic Mathematics 1 & 2 (1 st year, 84h each) · Advanced Mathematics 3 & 4 (2 nd year, 84h each)
2023–2024	TEK-UP	Analysis I (1 st year, 42h) · Probabilities and Statistics (3 rd year, 42h)
2021–2023	ENIT	Probabilities and Statistics (3 rd year, 42h)
2021–2022	ESPRIT	Basic Mathematics 1 & 2 (1 st year, 84h each)
2020–2021	ISIMM	Algebra and Analysis · Numerical Analysis (2 nd year, 21h) · Numerical Simulation with Python (2 nd year, 42h) · Probabilities and Statistics (3 rd year, 42h)
2019–2020	FSS	Algebra and Analysis (Bachelor in Computer Science 1 st year, 84h)

TEACHING

07. Skills

PROGRAMMING

PythonMATLABR

SYSTEMS & OFFICE
AUTOMATION

LinuxWindowsLaTeX

Microsoft Office

LANGUAGES

Arabic (Native)●●●●●

French (Fluent)●●●●●

English (Advanced)●●●●●

SKILLS

08. Internships, Certifications & Training

CERTIFICATIONS

- Understanding and Visualizing Data with Python

Coursera · University of Michigan · 15 Août 2022

Certificat ID : E54JZ5JMBW87
- Inferential Statistical Analysis with Python

Coursera · University of Michigan · 23 Nov. 2022

Certificat ID : MSUYWDT79HY6

FORMATION

FORMATIONS

- Exploitation of results using Matlab

University of Sfax · 9-15 Apr. 2018
- Teaching didactics

University of Sfax · 19-20 Mar. 2018

RESEARCH INTERNSHIP

- University of Claude Bernard Lyon I — Institut Camille Jordan

1 Sept. – 31 Oct. 2018

Transfer Formulas and Julia Inequalities for Operators · With Prof. Gilles Cassier

09. Editorial Activities

EDITOR

- Advanced Studies: Euro-Tbilisi Mathematical Journal (ASETMJ)

2024 – .present

REVIEWER

- Abstract and Applied Analysis

2023
- Journal of Inequalities and Applications

2025
- ASETMJ

2025 · 2026

EDITORIAL