

## CURRICULUM VITÆ

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*Nationality* French  
*Immigration Status* US Permanent resident  
*Languages* French (native), English (fluent), Spanish (fluent)  
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## EDUCATION

1996-1999 Ph. D. (Mathematics)

## TEACHING POSITIONS

### DIRECTION OF STUDENTS

- **Undergraduate research project:**
  - **At NJCU**
    - Sally Mangassa, *Order and Spacetime*, Summer 22
    - Rachael Mozzarella, *Domain Theory and Topology*, Summer 22
    - Daniel Esteva, *Quaternions and their geometric interpretation*, Summer 21
    - Jason Gonzaga, *Spaces of ultrafilters and convergence spaces*, Summer 20
    - Abdelrahman Bereka, *Real Induction*, Summer 19
    - Leonardo Moncada, *Counting collisions, tracking beams of light, and Pi*, Summer 19
    - Ammer Abdin, *convergence, filters and ultrafilters*, Summer 19 and Summer 20
    - Angel Madera, *fractals and fractal dimension*, Summer 18
    - Crystal Simon, *a geometric approach to the Basel problem*, Summer 18
    - Fadoua Chigr, *elements of convergence theory*, Summer 17 (presented at NJCU Research Symposium, April 18; at the STEM C2 Research Summit at Bergen Community College on April 13, 2018; at NYC Math Alliance Regional Conference, Dean University, September 15, 2018)
    - Fares Boutrous, *decomposition of continuity*, Summer 17 (presented at NJCU Research Symposium, Spring 18)
  - **At Georgia Southern**
    - Daniel Diaz Casanueva, *quotient of metric spaces*, Fall 12-Spring 13
    - William Trott, *Ultrafilter techniques in Ramsey Theory* (Fall 2011 and Spring 2012: presented at Eagle Undergraduate Mathematics Conference and Kennesaw Mountain Undergraduate Mathematics Conference in Spring 2012)
    - Anh Tran, *Structure of spaces of ultrafilters and combinatorial applications* (Fall 2009 and Spring 2010: presented at Eagle Undergraduate Mathematics Conference in Spring 2010)
    - Jessee Nesmith, *filters and compactifications*, Spring and Fall 2008
- **Master Thesis directed:**
  - **At NJCU**

- o Fadoua Chigr, *Convergence spaces theory and applications in Topology*, Fall 18-Fall 19
- o Naima Ouabourrane, *On the concepts of limit and of infinitesimal*, Fall17-Spring 18
- o Abdurhaman Pllana, *elements of fixed point theory*, Fall 16-Spring 17
- o Sofiane Boudib,

- NSF grant (DMS-1132350) “*31<sup>st</sup> Southeastern Atlantic Regional Conference on Differential Equations*” (co-Pi) **\$19,600** (Spring 2011)
- GSU Faculty Development Travel Grant (Spring 2010). \$1536 (Spring 2010)
- NSF grant (DMS-0948727) “*Spring Topology and Dynamical Systems Conference 2010*” (co-PI) **\$49,453** (Fall 09)
- Georgia Southern Service Grant “*2010 Spring Conference on Topology and Dynamics*”(PI) \$992 (Fall 09)
- Departmental Foundation grant \$420 (Spring 2009)
- Georgia Southern Service Grant “*22<sup>nd</sup> Summer Conference on Topology and its Applications*”, \$1,000 (Fall 06)
- NSF grant (DMS- 0603294) “*21<sup>st</sup> Summer Conference on Topology and its Applications*” (PI), **\$25,000** (2006)
- Georgia Southern Faculty Research Grant “*Applications of generalized topology*”(PI) **\$10,000** (2006)
- Georgia Southern Travel Grant (summer 2005): \$360
- Georgia Southern CLEC Lecture support:
  - o Spring 2005 \$980
  - o Spring 2006 \$980
  - o Fall 2006 \$980
  - o Spring 2007 \$1180
  - o Fall 08 \$942

### OTHER ACTIVITIES

Reviewer work	<p><b>Journals:</b> Topology and its Applications, Topology Proceedings, Quaestiones Mathematicae, Houston Journal of Mathematics, Proceedings A.M.S., International Journal of Mathematics and Mathematical Sciences, Commentationes Mathematicae Universitatis Carolinae, Sochoow Mathematical Journal, Rendiconti Circ. Palermo, Mathematica Bohemica, Colloquium Mathematicum, Mathematics Magazine (MAA), Theory and Applications of Categories, Mediterranean Journal of Mathematics, Acta Mathematica Hungarica, Questions and Answers in Topology, Filomat, Hacettepe Journal of Mathematics and Statistics, Theory in BioSciences</p>
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- Member (2005-present) former **Chair** (elected to 3 years term 2014-2017) of the Advisory Board to Summer Conferences on Topology and its Applications

Conference  
organization

## TALKS AT CONFERENCES

- May 21*  $\beta$   
54<sup>th</sup>
- July 18*
- March 17*
- August 16* *Convergence frames*, 31<sup>st</sup> Summer Conference on Topology and its Applications, Leicester University, UK, August 2-5, 2016
- March 16* *On metrizability of dual groups*, 50<sup>th</sup> Spring Topology and Dynamical Systems Conference, Baylor University, Waco, TX, March 10-13, 2016.
- November 15* *A flipped classroom model and self-graded homework*, New Jersey Sectional

*Diagonality in spaces of open sets*, Special session on Categorical Topology,  
*March 2011* 2011 Spring AMS Southeastern sectional meeting, March 12-13, Georgia  
Southern University.

*July 2010* *When are the Isbell topology on  $C(X)$ ,*

## **PUBLICATIONS**

**Published or accepted for publication in international journals**

16. Frédéric Mynard, *A convergence-theoretic viewpoint on the Arzelà-Ascoli Theorem*, Real Analysis Exchange, 38(2): 431-444, 2013
17. F. Jordan and F. Mynard, *Core compactness and diagonality in spaces of open sets*. Applied General Topology, 12(2): 143-162, 2011
18. S. Dolecki, F. Jordan and F. Mynard, *Group topologies coarser than the Isbell topology*, Topology and its Applications 158(15): 1962-1968, 2011
19. R. Kopperman, F. Mynard and P. Ruse *quasi-metric representations of various categories of closure spaces*, Topology Proceedings, 37: 331-347, 2011
20. Szymon Dolecki and Frédéric Mynard *When is the Isbell topology a group topology?* Topology and its Applications 157(8):1370-1378, 2010.
21. Frédéric Mynard and Gavin Seal, *Phenotype Spaces*, Journal of Mathematical Biology, Vol. 60 No 2: 247-266, 2010
22. Frédéric Mynard, *Measure of compactness for filters in the approach setting*. Quaestiones Mathematicae 31, 189–201, 2008
23. Szymon Dolecki, Francis Jordan and Frédéric Mynard, *Reflective classes of sequentially based convergences, sequential continuity and sequence-rich filters*. Topology Proceedings 31 No. 2, pp. 457-479, 2007
24. Frédéric Mynard, *Products of compact filters and applications to classical product theorems*. Topology and its Applications, 154(4): p. 953-968, 2007
25. Frédéric Mynard, *Unified characterization of exponential objects in TOP, PRTOP and*

39. Frédéric Mynard, *Coreflectively modified continuous duality applied to classical product theorems*, Applied General Topology, Volume 2, No. 2, pp. 119-154, 2001
40. Szymon Dolecki and Frédéric Mynard, *Convergence-theoretic mechanisms behind product theorems*, Topology and its Applications, 104: 67-99, 2000
41. Szymon Dolecki and Frédéric Mynard, *Cascades and multifilters*, Topology and its Applications, 104: 53-65, 2000
- 42.

**SERVICE**  
**Department and University Services at New Jersey City University**

**Departmental Committees and service:**

- Department Chair Summer 21-
- Department co-chair Fall 20-Summer 21
- Curriculum committee (Fall 14-)
- Graduate committee (Fall 14-)
- Lab coordinator (Spring 15-Fall 19)
- Tutoring lab coordinator (Fall 17-Fall 19)

**University service:**

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