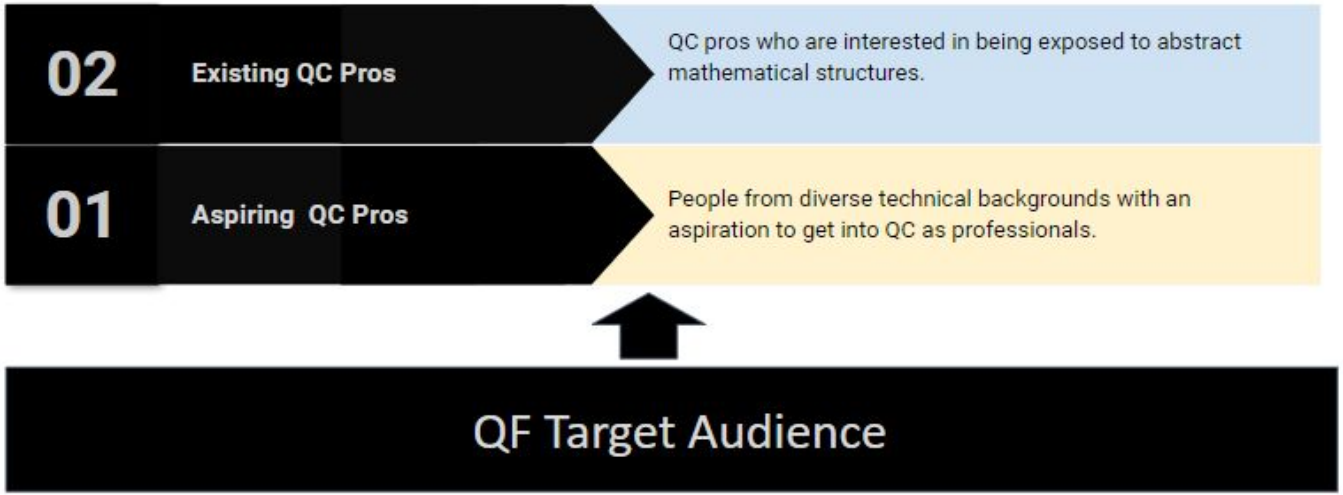
An Open Mathematical Knowledge Sharing Community
Brought to you by Zaiku Group and Homomorphic Labs.

Q&A Session - Monday, April 15.

Bambordé Baldé

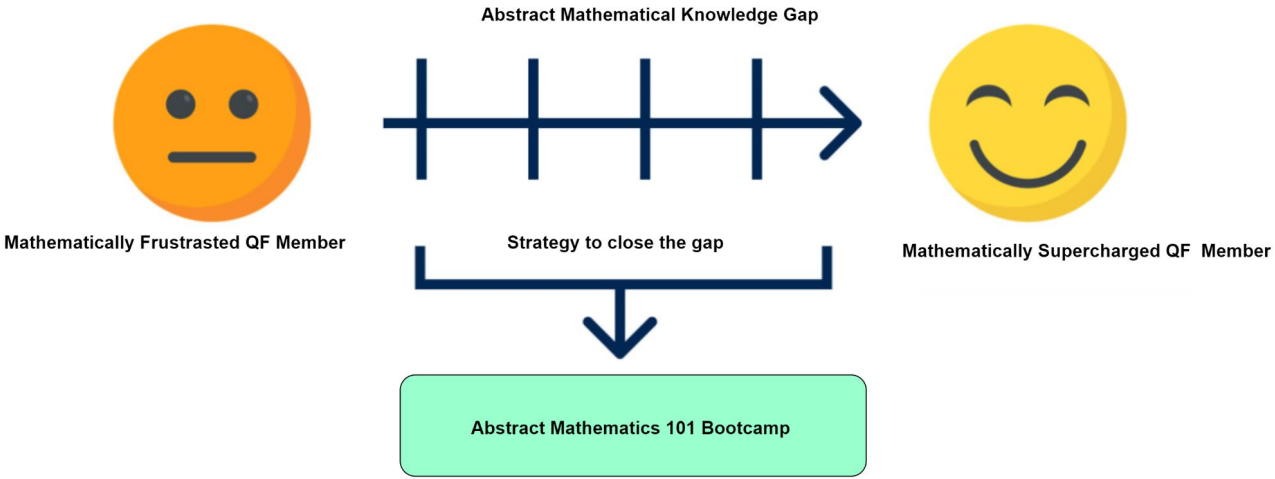
What is the Quantum Formalism (QF) Community?

QF is a free online course series provided by the Zaiku Group, aimed at exposing abstract mathematical topics to a diverse group of STEM professionals looking to break into the nascent quantum computing.



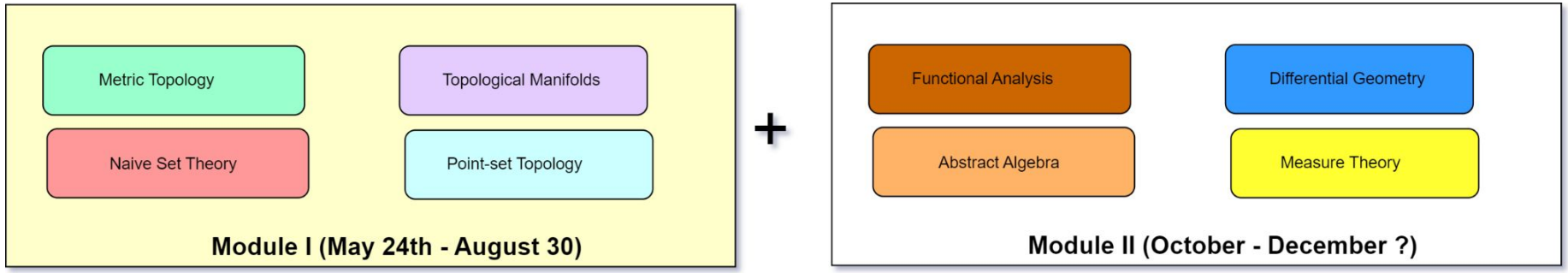
Why the Abstract Mathematics Bootcamp?

The bootcamp is designed to bridge the foundational knowledge gap between established QF community members and those who have joined us within the past year.



The Abstract Mathematics Bootcamp Structure

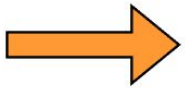
The bootcamp is divided in two core modules:



The Bootcamp Curriculum (Module I): May 24th - August 30th

- Basic/naive notion of a set
- The union of sets
- The intersection of sets
- The complement of a set
- Cartesian products
- Maps between sets
- Countable and uncountable sets
- Finite and infinite sets

Naive Set-theory



- The abstract notion of topology on a set
- Topological spaces
- Closed subsets
- Subspace topology
- Neighbourhoods
- Hausdorff spaces

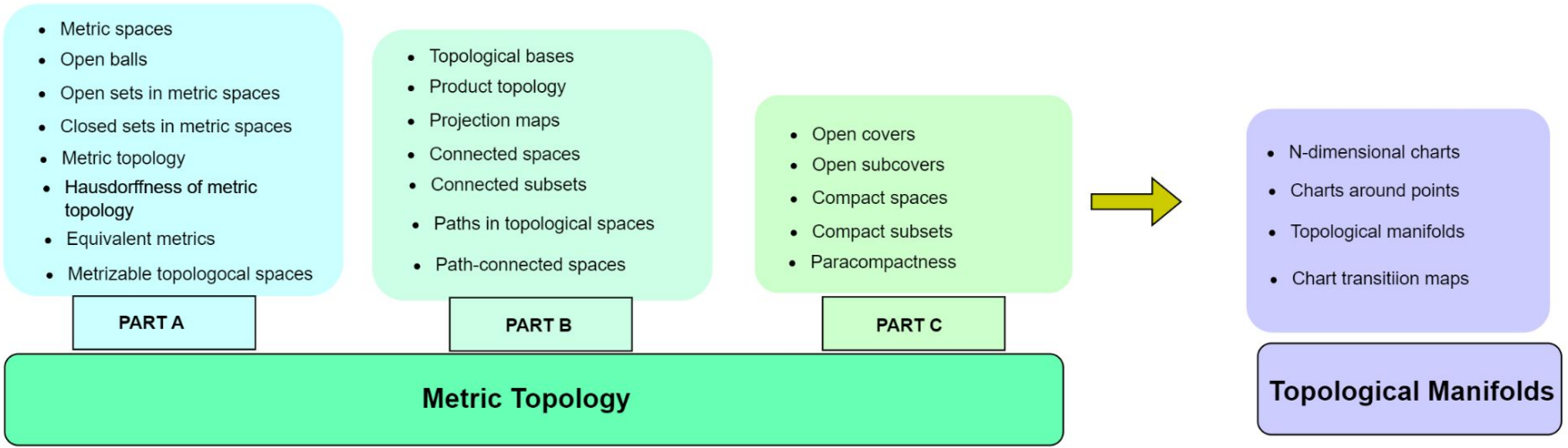
PART A

- Subset interior
- Subset closure
- Subset exterior and boundary
- Continous maps
- Homeomorphisms

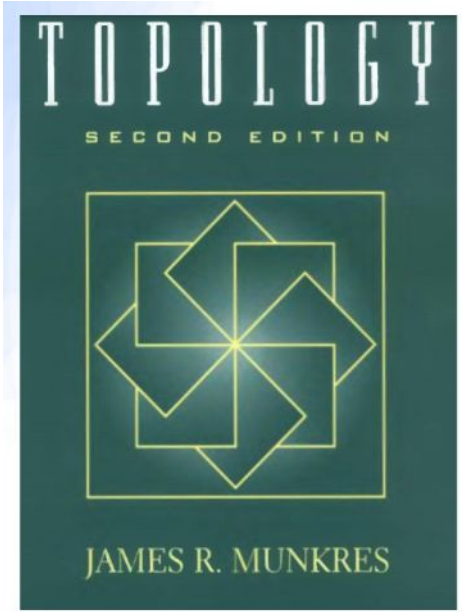
PART B

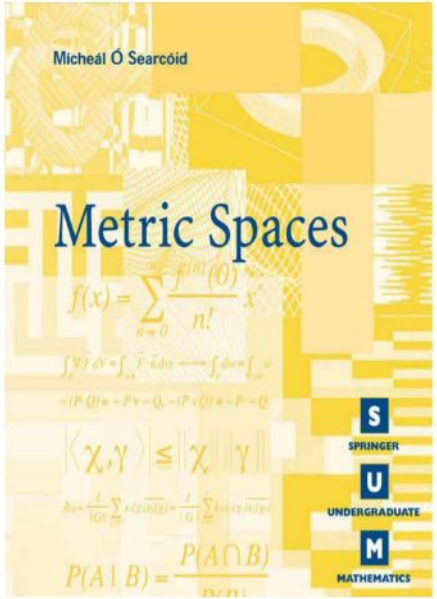
Point-set Topology

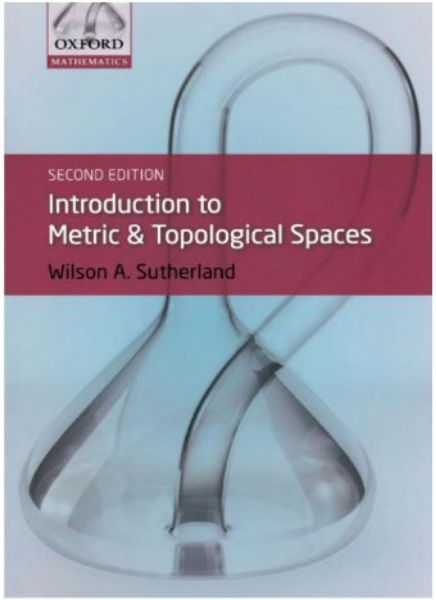
The Bootcamp Curriculum (Module I): May 24th - August 30th



The Bootcamp References (Module I): May 24th - August 30th

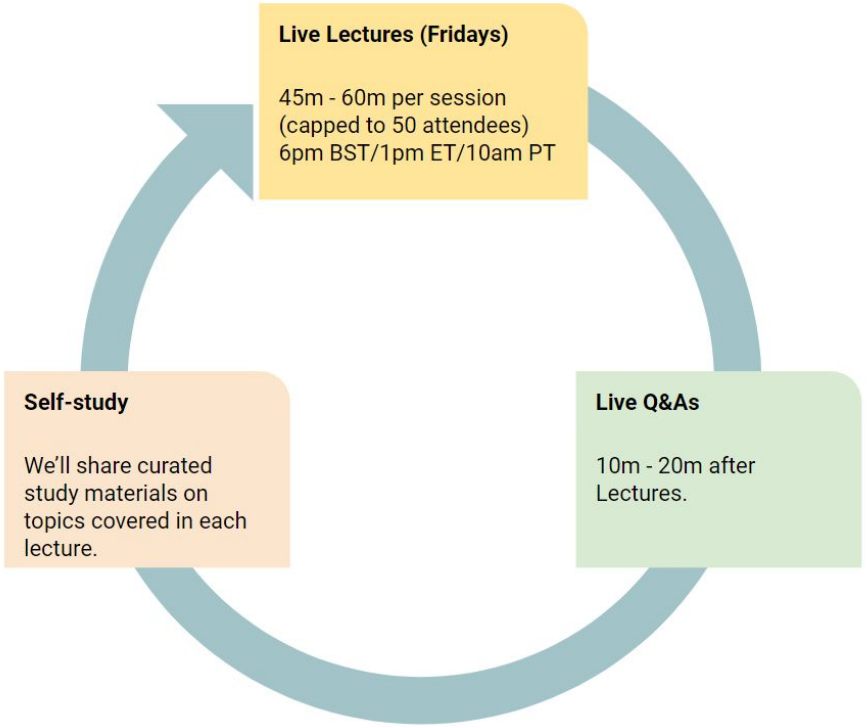




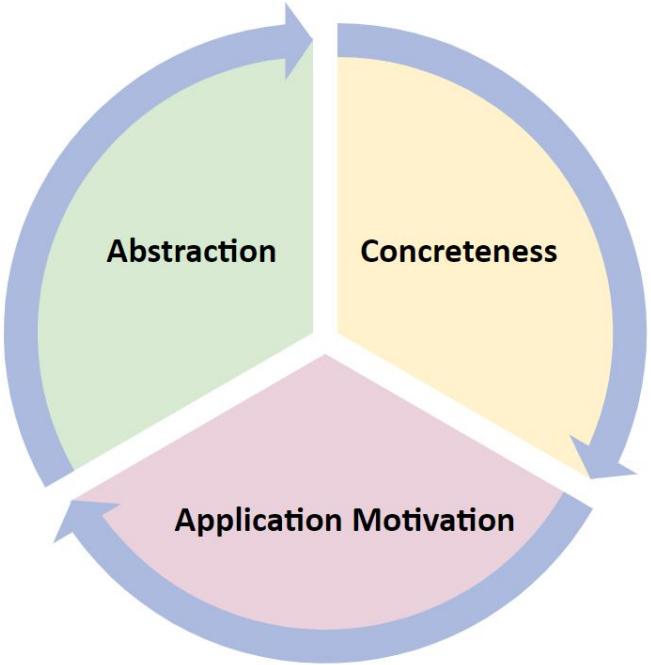


Reference Materials

The Bootcamp Format (Module I): May 24th - August 30th



The Bootcamp Lecture Approach (Module I): May 24th - August 30th

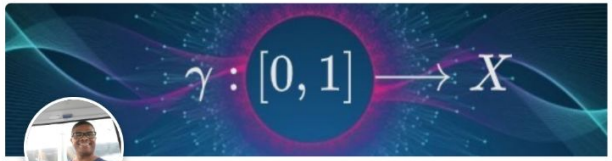


The Bootcamp Team (Module I): May 24th - August 30th

Jac Novak (She/Her) · 1st
Cross-Cultural Leader|Tourism and Hospitality Professional|Specialized in Research Marketing exploring the deep-tech landscape|Solo traveler & Writer@theroadbyjacnovak, teaching Women how to travel the world alone safely

Homomorphic Labs Ltd
EBAC - Escola Britânica de Artes Criativas e Tecnologia

Bootcamp Experience Manager



Bambordé Baldé
Co-Founder & Head of Mathematical Sciences at Zaiku Group.
United Kingdom · Contact Info
2K followers · 500+ connections
See your mutual connections

Bootcamp lecturer

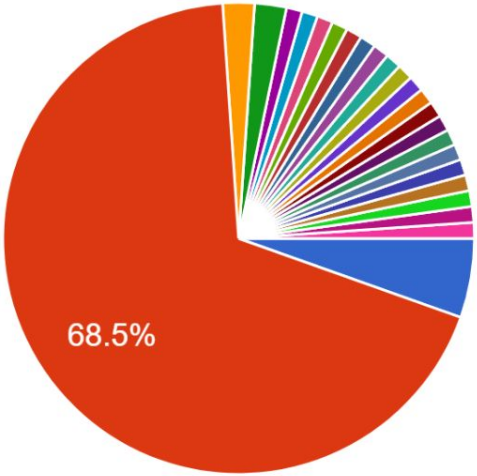
Max Arnott · 1st
Quantum Machine Learning & Functional Analysis
United Kingdom · Contact info

Zaiku Group Ltd
Lancaster University

Bootcamp TA

What best describes your mathematical level?

92 responses

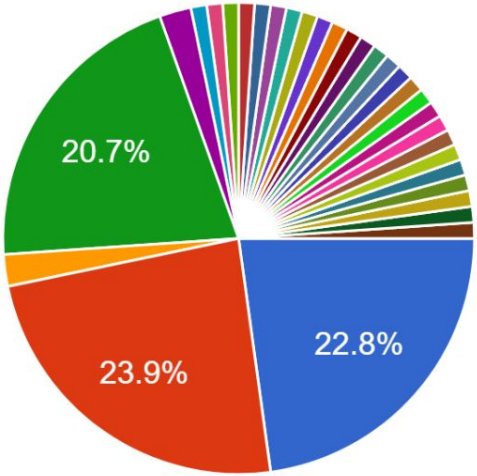


- High school level mathematics
- Undergraduate university level mathe…
- Post-Graduate Student
- Postdoc
- Bachelor Degree in Electronic Engineer
- graduate level mathematics
- Other STEM (Not Mathematics) UG le…
- Advanced, Master Level with clear hn…

1/3

What describes best your profile/background?

92 responses



- Researcher in Quantum Information S…
- Researcher in another STEM related f…
- Aspiring Quantum Computing Pro Enr…
- Professional in a STEM related field a…
- Master's student in Physics
- BSc Molecular Genetics
- Quantum Enthusiastic
- software developer

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GitHub: github.com/quantumformalism

YouTube: youtube.com/Zaikugroup

LinkedIn: linkedin.com/showcase/quantum-formalism

The Bootcamp Abstraction Tips (Module I): May 24th - August 30th

1. Embrace abstraction i.e. take the abstraction red pill!:)
2. One step at a time approach to the covered abstract concepts.
3. Try build your own intuition of the covered abstract concepts.
4. Try do proofs by yourself before checking other people's proofs.
5. If you struggle to understand a concept, cross reference different sources.
6. Setup a study group where you can present proofs to each other.