Max Carter

Curriculum Vitae

School of Mathematical and Physical Sciences,
The University of Newcastle,
Callaghan, NSW, Australia, 2308
☏ *(+61) 439300238*
✉ *max.carter@newcastle.edu.au*
🖥 *https://max-carter-math.github.io/home/*

Education

2021–Present	**Master of Philosophy (Mathematics)**, *University of Newcastle* (In Progress).
2017–2020	**Bachelor of Mathematics (Honours)**, *University of Newcastle, First Class Honours, 94 WAM, 99 Thesis Mark*.
2015–2016	**High School Certificate**, *Maitland Grossman High School, Australia*.

Publications & Written Work

Nov 2020	Carter, M., *Two Properties of Totally Disconnected Locally Compact Groups*, Honours Thesis, University of Newcastle, (2020).
Aug 2020	Carter, M., Tornier, S., Willis, G., *Free Products of Graphs*, Australasian Journal of Combinatorics, **78(1)**, (2020), 154-176.
May 2020	Carter, M., Willis, G., *Decomposition Theorems for Automorphism Groups of Trees*, Bulletin of the Australian Mathematical Society, DOI: 10.1017/S0004972720000465, Published Online May 2020.
Feb 2019	Report on *Free Products of Graphs* for AMSI Vacation Research Scholarship. Details can be found at `https://vrs.amsi.org.au/student-profile-max-carter/`.

Teaching

2019 - Present	University of Newcastle: I have run workshops/tutorials for the below mathematics courses at the University of Newcastle. The role also involves frequent grading of assignments and exams, along with invigilating in class exams.

Sem 2 2020: MATH2310 - Calculus of Science and Engineering

MATH1120 - Mathematics for Engineering, Science and Technology 2

MATH1001 - Preparatory Studies in Mathematics

Sem 1 2020: MATH2340 - Linearity and Continuity

MATH2330 - Real Analysis

Sem 2 2019: MATH1002 - Foundational Studies in Mathematics

MATH1001 - Preparatory Studies in Mathematics

Sem 1 2019: MATH1001 - Preparatory Studies in Mathematics

2018 - Present	I currently provide a private maths tutoring service for undergraduate students across all levels studying mathematics courses at the University of Newcastle. This job involves preparing and giving lessons to students and assisting them with their studies outside of class time.

Talks

26 Nov 2020	*Two Properties of Totally Disconnected Locally Compact Groups*, Honours Thesis Seminar, University of Newcastle
24 Jul 2020	*Two Properties of Totally Disconnected Locally Compact Groups*, Local Seminar, University of Newcastle
7 Nov 2019	*Decomposition Theorems for Automorphism Groups of Trees*, Local Seminar, University of Newcastle
8 Feb 2019	*Free Products of Graphs*, AMSI Connect Conference, University of Melbourne
15 Dec 2018	*Free Products of Graphs*, Local Seminar, University of Newcastle

Scholarships & Grants

Jan 2021 - Dec 2022	Australian Government Research Training Program Scholarship ($\sim$ \$57000 AUD)
Dec 2020	Undergraduate Summer Research Scholarship (\$3000 AUD)
Dec 2019	Faculty of Science Summer Research Scholarship (\$3000 AUD)
Nov 2019	AMSI Summer School Travel Grant ($\sim$ \$2000 AUD)
Dec 2018	AMSI Vacation Research Scholarship (\$3000 AUD)

Awards & Achievements

Oct 2020	*Mathematics Prize in 3000 Level Mathematics*. Awarded annually to the student with the best performance, if of sufficient merit, in level 3000 mathematics courses at the University of Newcastle. The prize was awarded to me for my studies during 2019.
Apr 2019	*Ivan Lincoln Rose Prize in Applied Mathematics*. Awarded annually to the student with the best performance, if of sufficient merit, in level 3000 applied mathematics courses at the University of Newcastle. The prize was awarded to me for my studies during 2018.
2017, 2018, 2019	Placed on the Faculty of Science Commendation List (University of Newcastle)
2018, 2019, 2020	A part of the Bachelor of Mathematics Merit Pathway
Nov 2016	Award for Outstanding Achievements in Physics and Mathematics
Nov 2016	Award for High Achievements in HSC Mathematics

Languages

English (Mother), German (Basic), French (Basic).