

Personal details

Personal details

First / given name Congxin
Second given name
Third given name
Surname/family name Li
Date of birth 21 April 2001
Preferred first/given name Congxin
Previous surname
Country of birth
Legal nationality
Dual nationality
Country of residence China
Have you previously studied with us at the University of Bristol? No

Contact details

Home address

Please provide your permanent residential address. If you have another address and would prefer for us to contact you at that address instead you have the opportunity to add a correspondence address in the next section.

Country China
Postcode
Address Line 1 Flat 1305, Building 11
Address Line 2 Tanyue Sunshine City Community
City Fuzhou
County China
Telephone

If you would like us to send any postal correspondence to an address which is not your home address please enter an alternative address here. If you want us to send correspondence to your home address then please select No.

Do you want to add a correspondence address? No
Country China
Postcode
Address Line 1 Flat 1305, Building 11
Address Line 2 Tanyue Sunshine City Community
City Fuzhou
County China
Telephone

Agent

Agent details

Agency Name
Email address

Other information

Additional Documents

Please upload required documents as outlined in your admissions statement

Mode of study

How would like to study this Full Time
programme?

Qualifications

Qualifications

Institution	Qualification	Type	Subject	Actual/predicted	Grade	Start date	End date
Durham University	First degree BA/BSC etc	Academic Qualification	Mathematics	Predicted	82	27/Sep/2021	01/Jun/2024
University of Warwick	Master's Degree (PG) EU	Academic Qualification	Mathematics	Predicted	Distinction	01/Oct/2024	10/Dec/2025
Durham University	First degree BA/BSC etc EU	Academic Qualification	Mathematics	Actual	First-Class	27/Sep/2021	01/Jul/2024

If these qualifications have altered since your last application please note the changes in the free text box here.

English Language

Is English your first language? No
What is your first language? Mandarin
Did you study at school/university where you were taught in English? Yes
For how many years? 4
Have you sat a relevant English language test? No

TOEFL (internet-based)

Registration number
Date of TOEFL test
TOEFL reading score
TOEFL listening score
TOEFL speaking score
TOEFL writing score
TOEFL total score

IELTS (International English Language Testing System)

Test report form (TRF) number
UKVI number (if applicable)
Date of IELTS test
IELTS listening score
IELTS reading score
IELTS writing score
IELTS speaking score
IELTS total score

Pearson Test of English

Score report code
Date of Pearson test
Pearson listening score
Pearson reading score
Pearson speaking score
Pearson writing score
Pearson overall score

Other English Language test

Name of course
Registration number
Date of test
Listening score
Writing score
Reading score
Total score

Experience

Current Employer

Employer name and address Tongtongchen Programming Education
Job title and main duties Teaching Assistant Provided support for programming tutorials, assisting students with programming tasks and explaining basic concepts.
Full time/Part time Part time
Date of Appointment 01 July 2021
End date (if applicable) 10 August 2021

Previous employment 1

Employer name and address
Job title and main duties
Full time/Part time
Date of Appointment
End date (if applicable)

Previous employment 2

Employer name and address
Job title and main duties
Full time/Part time
Date of Appointment
End date (if applicable)

Previous employment 3

Employer name and address
Job title and main duties
Full time/Part time
Date of Appointment
End date (if applicable)

Other Experience

Do you have any other relevant work experience to support your application? No
Please provide details

Personal statement

Personal details

Do you have a personal statement to upload? Yes
Please type your personal statement in the box

Research proposal

Research proposal

Proposed supervisor 1 Mark F Hagen

Proposed supervisor 1

Proposed project title
(max 150 chars)

Passport and visa

Visa required

Do you require a visa to study in the UK? Yes

Please fill out your passport details below. If you are unable to provide these at the current time you will have another opportunity to upload your passport after you submit the form. If you do not provide us with this information we will be unable to issue you with your confirmation of acceptance number and you will be unable to obtain a visa.

Passport details

Passport number EG9697275

Further details

Have you previously studied in the UK? Yes

What was the highest level of study in the UK? master

Please confirm the total length of your UK study in years 4

Referees

Referee 1

Do you have a reference to upload? No

Type of reference Academic

Referee title Professor

Forename Anna

Surname Felikson

Position Professor

Institution/Company Durham University

Email address anna.felikson@durham.ac.uk

Country United Kingdom

Referee 2

Do you have a second reference to upload? No

Type of reference Academic

Referee title Professor

Forename Anne

Surname Taormina

Position Professor

Institution/Company King's College London

Email address anne.taormina@kcl.ac.uk

Country United Kingdom

Funding

Funding 1

What is your likely source of funding? Yourself/family

Please give the name of your scholarship or Studentship
Please specify

Percentage from this source 100

Is this funding already secured? Yes

Funding 2

What is your likely source of funding?

Please give the name of your scholarship or Studentship
Please specify

Percentage from this source

Is this funding already secured?

Funding 3

What is your likely source of funding?

Please give the name of your scholarship or Studentship
Please specify

Percentage from this source

Is this funding already secured?

Other funding

I would like to be considered for other funding opportunities Yes

Documents

Document type	File name
Transcript	Warwick enrolment.pdf
Research proposal	RP.pdf
References	Congxin_Li_.pdf
Passports and visas	Passport.pdf
Curriculum vitae	CV_no name.pdf
Degree certificate	bachelor certificate_LETTER.pdf
Passports and visas	visa_compressed.pdf
Transcript	Bachelor Transcript_Congxin Li.pdf
Personal statement	PS.pdf

By ticking the checkbox below and submitting your completed online application form, you acknowledge the University of Bristol will use the information provided from time to time, along with any further information about you the University may hold, for the purposes set out in the [University's full Data Protection Statement](#). Applicants applying to the collaborative programmes of doctoral training should also read the [Data Protection Statement](#) for collaborative programmes of doctoral training.

The information that you provided on your application form will be used for the following purposes:

- To enable your application for entry to be considered and allow our Admissions Advisors, where applicable, to assist you through the application process;
- To enable the University to compile statistics, or to assist other organisations to do so. No statistical information will be published that would identify you personally;
- To enable the University to initiate your student record should you be offered a place at the University.

All applicants should note that the University reserves the right to make without notice changes in regulations, courses, fees etc at any time before or after a candidate's admission. Admission to the University is subject to the requirement that the candidate will comply with the University's registration procedure and will duly observe the Charter, Statutes, Ordinances and Regulations from time to time in force.

By ticking the checkbox below and submitting your completed online application form, you are confirming that the information given in this form is true, complete and accurate and that no information requested or other material information has been omitted. You are also confirming that you have read the Data Protection Statement and you confirm the statement below.

I can confirm that the information I have provided is true, complete and accurate. I accept that the information given in my application will be stored and processed by the University of Bristol, in accordance with the *UK General Data Protection Regulation and Data Protection Act 2018*, in order to:

- Consider my application and operate an effective and impartial admissions process;
- Monitor the University's applicant and student profile;
- Comply with all laws and regulations;
- Ensure the wellbeing and security of all students and staff;
- If my application is successful to form the basis of the statement made within my application.

If the University of Bristol discovers that I have made a false statement or omitted significant information from my application, for example examination results, I understand that it may have to withdraw or amend its offer or terminate my registration, according to circumstances.

EDUCATION

University of Warwick

Master of Science in **Mathematics** (Expected)

- ♦ Core Courses: *Manifolds, Graph Theory, Reflection Groups, Group Theory, Geometric Group Theory, Algebraic Topology*

Coventry, UK

Oct. 2024-Present

Durham University

Bachelor of Science in **Mathematics**

- ♦ First-Class Honors degree
- ♦ Core Courses: *Analysis, Linear Algebra, Calculus, Programming, Dynamics, Probability, Statistics, Discrete Mathematics, Complex Analysis, Analysis in Many Variables, Algebra, Mathematical Modelling, Geometric Topology, Elementary Number Theory, Mathematical Physics, Special Relativity and Electromagnetism, Analysis, Number Theory, Galois Theory, Geometry, Project*

Durham, UK

Sept. 2021-Sept. 2024

RESEARCH EXPERIENCE

Geometric Constructions of Points, Lines, Circles and Curves

Bachelor's Project

Durham, UK

Oct. 2023-Apr. 2024

Supervised by Anna Felikson

Overview: This project is essentially a literature review report, covering the constructions of points, lines, circles, and curves, as well as the local constructability of algebraic curves using linkages.

- ♦ Discussed the constructability of points, lines, and circles, including the introduction of constructible numbers method and the expansion to derivability and game definition.
- ♦ Discussed local constructability of algebraic curves through proving Kempe's Universality Theorem.

Research on the Resolvent Norm

Research Assistant, Department of Mathematical Sciences, Durham University

Durham, UK

June 2023-Aug. 2023

Funded by London Mathematical Society

Supervised by Sabine Boegli

Overview: This project aimed to classify for the potentials for which the resolvent norm of the Schroedinger operator can or cannot be constant.

- ♦ Utilized techniques from Complex Analysis and matrix theory to construct proofs and examples for the resolvent norm problems.
- ♦ Discovered different cases where the resolvent norm remains constant.
- ♦ Successfully established an example with a locally constant resolvent norm.

Simulation of Artificial Seismic Wave

Coursework Project

Durham, UK

Oct. 2022-Jan. 2023

Overview: This project focused on simulating artificial seismic waves using mathematical models.

- ♦ Solved the wave equation using advanced mathematical techniques.
- ♦ Constructed ray paths model for seismic waves.
- ♦ Analyzed collected data to extract reflected wave signals from full signals.
- ♦ Used heat maps and signal figures generated by the simulation to analyze the model and the method.

EXTRACURRICULAR INVOLVEMENT

Tongtongchen Programming Education

Teaching Assistant

Xiamen, CN

July 2021-Aug. 2021

- ♦ Provided support for programming tutorials, assisting students with programming tasks and explaining basic concepts.

XJTLU Diversity Association

Member of Activities Department

Suzhou, CN

Sept. 2020-Dec. 2020

- ♦ Organized large-scale offline activities to promote equality and human rights, such as Women's Day equality activities, Purple Pride Month anti-discrimination and anti-bullying activities, and LGBT Pride Day.
- ♦ Assisted in recruiting new members, organizing member training, and facilitating team-building activities to ensure departmental operation and development.

Volunteer Teaching in Bali, Indonesia

Volunteer Teacher

Online

Jan. 2021-Feb. 2021

- ♦ Taught Chinese language and shared Chinese culture and etiquette.

Volunteer in Cancer Research Charity Shop

Volunteer Salesclerk

Newcastle, UK

Aug. 2022-June 2023

- ♦ Assisted in product sales and organization.

ADDITIONAL

- ♦ **IT Skills:** Proficient in Python, Mathematica
- ♦ **Languages:** English (Proficient), Chinese (Native), Japanese (Intermediate)
- ♦ **Interests:** Photography, Playing clarinet

26 June 2024

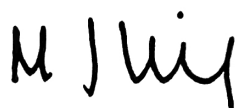
To Whom It May Concern

Name: Congxin Li
University ID Number: 000944754
Date of Birth: 21st April 2001

This is to certify that the above named person has successfully completed the following programme of study detailed below:-

Award: Bachelor of Science
Programme Title: Mathematics
Programme Outcome: Class I (Honours)
Date of Award: 1st July 2024
College: St Cuthbert's Society
Date of Admission: 27th September 2021
Date of Leaving: 21st June 2024
Mode of Study: Full-Time

Signature:



University Stamp:



Student Services Team

Why PhD?

The main reason is that I would like to know more about maths and I am interested in doing mathematical research. From my past experience with mathematics I realised that, the more you learn about maths, the higher perspective you have. Doing research can give you perspectives that you cannot get by only studying maths, as what is presented in textbooks is the successful outcomes of attempts but not the attempts themselves (say the process of finding a proper definition). However, attempts are important, especially your own failed ones. Also, I want to learn to do research because I know that it is hard, and I would like to put myself in a situation where I have to face challenges.

The other reasons include 1. Instead of following a certain route to study, I prefer a question-oriented way of studying. 2. I enjoy presenting, writing, and teaching maths. 3. I like the process of trying to solve a maths problem.

Personal Statement

When I was in middle school, I developed an interest in mathematics. I vividly remember that my desk mate would hand me small slips of paper every day, each containing a math problem. One of the problems was to prove that the general formula for the Fibonacci sequence is the one given in the question. I was astonished to discover that the formula for a sequence of natural numbers involved irrational numbers! I spent an entire class period trying to solve it, but to no avail. Finally, I asked my desk mate for the answer, only to find out that he didn't know either. However, he recommended a popular math book called *Mathematical Girls*. This book clearly illustrated how the general formula for the Fibonacci sequence could be derived through a journey between the world of functions and the world of numbers. I was fascinated by this elegant idea, which I later realized embodies a core concept in modern mathematics: traveling between different mathematical worlds. When a problem in one domain seems intractable, it can often be transformed into a problem in another domain.

In high school, mathematics remained my favorite subject, and I would often try to develop my own intuition and understanding while learning. For instance, when studying the logical statement "if A, then B," I imagined A and B as two discs, with B being contained within A. This visualization helped me see that whenever we "pick up" A, we inevitably "pick up" B as well.

When I entered university, I chose to major in mathematics. During the summer break of my sophomore year, I secured research funding from the London Mathematical Society and worked alongside a faculty member. It was not an entirely joyful experience, as I encountered numerous difficulties due to the advanced content involved. Yet, amidst these challenges, I discovered an unexpected sense of fulfillment—much like a long-distance runner who grows to love running despite the pain. I learned to find joy in the process of facing and overcoming obstacles. Previously, I had always been fixated on results, but I gradually came to realize that true joy lies in the journey itself. Moreover, solving a

mathematical problem is rarely a solitary endeavor; it is often a collaborative process involving many mathematicians contributing their insights. Mathematics, like music, unites people, and I find this communal aspect of the discipline beautiful. I aspire to be part of this process.

After the summer project, I began learning about the experiences of others who pursued doctoral studies in mathematics. Many described going through a certain period in their PhD, when little progress was made and positive reinforcement was lacking. I realized that pursuing a PhD requires a strong ability to face challenges, so I made a conscious effort to embrace difficulties rather than instinctively avoiding them, as I had in the past. Through observing and interacting with people in my department, I also identified certain qualities essential for research: persistence in tackling a problem, and the courage to ask questions rather than feigning understanding. I have since worked to cultivate these traits in my daily life.

In my junior year, knowing that I wanted to pursue a research career, I began developing myself as a researcher. I devoted significant effort to understanding the structure of each course, focusing on questions such as: What is the motivation behind this course? How does one chapter lead to the next? And what are the core ideas of the course? For example, in the module Number Theory, the central idea was to transform number-theoretical problems into problems about ideals and to resolve them using prime ideals. I also came to appreciate that the order in which a proof or theory is presented in a textbook is not necessarily the order in which mathematicians originally developed it. Therefore, when reading mathematical texts, I am not only to understand the material but also to uncover how a proof or theory was constructed and identify the skills I lack to construct something similar. Instead of focusing solely on mastering theoretical applications by solving numerous exercises, as I used to, I now dedicate more time to deep reading.

By the time I graduated, my favorite branch of mathematics was geometry. In my junior year, I took a module on geometry and was particularly impressed by two concepts. The first was the idea of symmetry of transformations. Given a mathematical object and a certain property of the object, if one can find a transformation that preserves the property and transforms the object into a simpler form, then we can solve rather complicated problems in a simple way. A classic example is proving that "the medians of a triangle in the Euclidean plane are concurrent." By finding a transformation that preserves concurrency (one that maps any triangle to a regular triangle), the problem is reduced to proving that the medians of a regular triangle are concurrent—a result that is immediately obvious. This approach eliminates the need for auxiliary lines or complex logical chains, offering a solution that is stunningly simple and elegant.

The second concept was hyperbolic geometry, developed through an axiomatic approach by altering Euclid's parallel postulate. Although its definitions (such as those for lines and distances in hyperbolic models) initially seem counterintuitive, hyperbolic geometry possesses an astonishing internal coherence and beauty. My fascination with geometry sparked a profound sense of wonder and a desire to explore further. Mathematics research shifted from being merely an idea to becoming a genuine aspiration. I believe this aspiration

stems not only from the beauty of geometry itself but also from the gradual deepening of my understanding and appreciation of mathematics over the past three years.

During the summer after graduation, I was introduced to the field of geometric group theory. Since my early encounters with group theory, I have been inclined to visualize mathematical concepts, which has allowed me to intuitively interpret group-theoretical results using geometric ideas. When I first encountered geometric group theory, it felt like a natural extension of my way of thinking. Moreover, it is a field that seamlessly bridges various areas of mathematics.

Throughout my undergraduate years, the greatest rewards of my mathematical training were not merely acquiring knowledge and techniques. More importantly, I gained a broader mathematical perspective, enabling me to view the field more structurally—for instance, understanding the development of a theory. I also developed a more systematic way of thinking. When faced with a mathematical problem, instead of blindly trying different approaches as I did in my freshman year, I now step back and simplify the problem to its essence. Additionally, I have grown to embrace challenges. Whereas I once saw challenges as obstacles, I now view them as opportunities. I eagerly anticipate the journey ahead in mathematics. Although it will undoubtedly involve difficulties, I am confident I will grow to love this discipline even more. And I know that in the future, what awaits me is not only more beautiful mathematics but also a better version of myself.

Areas I am interested in:

I am interested in geometric group theory. I have learned about group actions on trees and large-scale geometry, especially hyperbolic geometry. As I am taking related modules like geometric group theory and algebraic topology, I will have gained more knowledge and understanding about this field by the time I do my PhD.

One of the reasons I am interested in this field is that I find it fascinating to see the connection between algebra and geometry. Geometric group theory is about investigating this connection (Of course, it is not the only field doing that), as its main idea is to either see groups as geometric objects, or to understand the algebraic structure of a group by studying the space it acts on. Also, there are many interesting results showing this connection. For example, there is a proposition saying that if we let a group G act on a connected graph X , and if the action is free and transitive, then we are able to find a generating set S for G (through this group action), and the Cayley graph $\text{Cay}(G, S)$ is isomorphic to X . Moreover, I am interested in questions in algebra and enjoy working with geometry.

Inside geometric group theory, I am particularly interested in hyperbolic groups. Hyperbolic groups seem like a very nice way to categorise groups, in that it is big enough to contain many different groups to study them altogether as hyperbolic groups, but not too big so that it still possesses many nice properties.

I will be doing a geometric group theory related project for the master's degree I am doing in Warwick.

Projects I have done:

1. My bachelor's thesis is about geometric constructions of points, lines, circles, and curves. It is essentially a literature review report. The thesis has two parts.

The first part discusses the constructability of points, lines, and circles using tools like compass and straightedge. The main motivation in this part revolves around this question: How can you prove that a problem is unsolvable? We first introduce the method of constructible numbers, transferring the unsolvability of geometric constructions to the unsolvability of algebraic equations. Then we try to generalise this abstraction idea into the definition of derivability. However, this definition does not always work in certain cases. By discussing these cases, we develop a more refined definition for constructibility: game definition.

The second part discusses the constructability of algebraic curves using linkages by proving Kempe's Universality Theorem. We start with the initial proof given by Kempe, though it turned out to be flawed, it provided the basic ideas for the proofs later. Then we give the corrected version of the proof by resolving the issue: the degeneration of the geometric tools we constructed. Then we brace the tools to avoid degeneration.

2. The summer project about the resolvent norm of Schrödinger's operator. We study the resolvent norm of the discrete Schrödinger's operator. We investigate the conditions under which the constant resolvent norm can/cannot happen. We find some different cases of potential such that the resolvent norm is constant. We establish an example that has a locally constant resolvent norm.



immigrationservice@warwick.ac.uk
To You and congxinli_3@163.com

Oct 1
...



Our Ref: IO/ENRF

Student ID: 5631641

Dear Congxin Li,

Greetings from Student Immigration, we hope you are well.

We are pleased to inform you that you are now fully enrolled at the University of Warwick.

Please ensure you have read the remaining guidance in this email.

NEXT STEPS TO OBTAIN YOUR eVISA

If your BRP card is expiring [on 31 December 2024](#), you will need to create a UKVI account to access your eVisa if you haven't already done so. It is completely free, and you will be able to apply with a smart phone. An eVisa is a digital immigration status which provides proof of your visa and will allow organisations such as employers, landlords and universities, to check and verify your immigration status to assess your right to work, rent or study in the UK.



Reply to All



Delete



Archive



Move



Unread

... More



UNIVERSITY OF DURHAM

ACADEMIC TRANSCRIPT

Name: Congxin Li

Student Information:

Date of Birth: 21 April 2001
College: St Cuthbert's Society
University ID Number: 000944754
HESA ID Number: 2111169447545
Date of Admission: 27 September 2021
Date of Leaving: 21 June 2024
Mode of Study: Full Time

Programme Information:

Award: Bachelor of Science
Programme Title: Mathematics
Programme Code: G100
Programme Outcome: Class I (Honours)
Date of Award:
Min. Full-Time Duration: 3 year(s)

Module Code	Module Title	Module Level	Mark (%)	University Credits
Academic Year 2021-2022				
MATH 1031	Discrete Mathematics	1	71	20
MATH 1051	Analysis I	1	87	20
MATH 1071	Linear Algebra I	1	82	20
MATH 1587	Programming I	1	82	10
MATH 1597	Probability I	1	87	10
MATH 1607	Dynamics I	1	73	10
MATH 1617	Statistics I	1	69	10
MATH 1061	Calculus I	1	77	20
Academic Year 2022-2023				
MATH 2657	Special Relativity and Electromagnetism II	2	94	10
MATH 2011	Complex Analysis II	2	81	20
MATH 2031	Analysis in Many Variables II	2	90	20
MATH 2071	Mathematical Physics II	2	81	20
MATH 2581	Algebra II	2	80	20
MATH 2617	Elementary Number Theory II	2	88	10
MATH 2627	Geometric Topology II	2	72	10
MATH 2637	Mathematical Modelling II	2	69	10
Academic Year 2023-2024				
MATH 3011	Analysis III	3	73	20
MATH 3031	Number Theory III	3	65	20
MATH 3041	Galois Theory III	3	58	20
MATH 3201	Geometry III	3	71	20
MATH 3382	Project III	3	73	40

Comments:

NOT AN OFFICIAL TRANSCRIPT WITHOUT THE UNIVERSITY STAMP AND SIGNATURE

Student Registry
The Palatine Centre
Durham University
Stockton Road
Durham DH1 3LE

Tel: +44 191 334 6436
E-Mail: student.registry@durham.ac.uk

M Juy

For Registrar and Secretary



OFFICIAL STAMP

This transcript does not show the outcomes of decisions made by Boards of Examiners about any mitigating circumstances or medical evidence, which may exist for the student named. The overall academic performance of the student, as judged by the Board of Examiners, is reflected in the degree classification awarded by the University.



Faculty of Natural, Mathematical and
Engineering Sciences
Department of Mathematics

Prof. Anne Taormina
Department of Mathematics
King's College London
Strand, London WC2R 2LS
United Kingdom

Re: Candidate's Name: Congxin Li
Programme of Study: PhD in Mathematics

To whom it may concern.

I am writing in support of Miss Congxin Li, who is applying for the PhD in Mathematics programme at the University of Bristol.

I came to know Congxin in the academic year 2022-23 in the context of the second year course of Analysis in Many Variables that I was teaching to a class of 450 students who studied for a BSc in Mathematics degree, an MMath degree or a Natural Sciences degree. This module was generally perceived as hard, because students were confronted with completely new concepts (e.g. basic distribution theory and Green's functions). Congxin scored 90% in that module and was in the top 8% of that group of 450 students. She was part of a cohort of 167 BSc students and was ranked 22nd overall at the end of her BSc degree programme (top 13%) with an overall average of 78.75%.

Congxin attended my fortnightly tutorials for the Analysis in Many Variables module throughout the academic year. She was quite reserved and shy at first, but I soon noticed that she was always well prepared for tutorials and was asking pertinent questions. It was great to see her gain assurance as the year went by, happy to stand up on a regular basis and explain her method of proof on the blackboard to the group of twelve tutees. She was conscientious, resilient and enjoyed doing mathematics. Unfortunately, I lost track of her once she started her final BSc year at Durham, and my contribution to a reference is limited as I was not her academic adviser nor her final year project supervisor. Her motivation to further her studies started to emerge in the year I knew her (2022-23). In fact, I am not surprised she is now studying for an MSc in Mathematics at Warwick University. Hopefully, a referee from Warwick can provide a more accurate assessment of her aptitude for PhD studies. She had no difficulty communicating science in English both orally and in writing.

To summarise, I can confirm that Congxin had a lot of drive and enjoyed most subjects, was very conscientious and eager to learn beyond the material presented in the course I taught. There were early indications that she might contemplate further study, and I believe that finishing her BSc in the top 13% of her cohort with a good first degree classification has motivated her to apply for an MSc a year ago. From my perspective, Congxin has potential.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'Anne Taormina', with a long horizontal flourish extending to the right.

Anne Taormina
Head of Department of Mathematics
anne.taormina@kcl.ac.uk

Department of Mathematical Sciences

Prof. Anna Felikson
Department of Mathematical Sciences
Durham University
Upper Mountjoy Campus
Stockton Road
Durham University, DH1 3LE
anna.felikson@durham.ac.uk

March 1, 2025

Letter of Recommendation

This is to support the application by Congxin Li to a PhD programme in Mathematics at University of Bristol.

I know Congxin since October 2023 when she started to work on her final year Project “Geometric Constructions” under my supervision. Since then we are having weekly meetings in a group of 2 students. Congxin also took a Geometry modules that I gave the same year. That was a final year (Year 3) of Congxin’s undergraduate studies in Durham.

During the Project meetings, Congxin demonstrated a lot of motivation to study interaction between geometry and algebra. She was independently reading research papers and every week had some story to deliver at the board, and quite often it would be a half an hour talk. This was mostly covering the material I did not see before, and I find her explanations very useful: they were always very detailed and very efficient at the same time, and I can say that Congxin has a good measure of how much to explain to provide for the best understanding. She was also very good at answering questions and clarifying unclear points. I need to say that being able to deliver some new material almost on weekly basis is very unusual for students at Level 3, and that after supervising more than 30 students in different final year projects at Level 3 and 4, I can only remember one case when a student did something comparable to that - and this was a student at Level 4, who later obtained a PhD and took a postdoctoral position. The efforts of the year have resulted in a carefully written final report, so that the project earned the first class mark (73 out of 100).

Congxin is definitely able to creative thinking. She got a first class result in the final exam of the Geometry module (which was based on solving questions were one cannot use any algorithms and needs to creatively apply the knowledge obtained throughout the year). At the same time, I cannot say that Congxin used all possibilities to demonstrate creativity - I cannot remember anything in this direction on top of what was required. It may happen though, that I just have no appropriate information.

Congxin graduated from the undergraduate studies in Durham in Summer 2024 with the first class honours degree. Her overall average is 78.75 (out of 100) and she is in top 15 percents of the graduates in her programme (of 167 students).

Currently Congxin is doing MSc at Warwick and developing a strong interest in Geometric

Group Theory.

In addition to her strong academic skills, high intellectual level, and extremely high and broad motivation, Congxin is also a very nice person to communicate with.

Based on my knowledge of Congxin, I recommend Congxin Li to to the PhD programme in Mathematics at the University of Bristol.

Sincerely yours,

Prof. Anna Felikson



Lower Mountjoy Stockton Road Durham DH1 3Le
Telephone +44 (0) 191 334 3050 Fax +44 (0) 191 334 3051
Email maths.office@durham.ac.uk Web www.durham.ac.uk

*The Ministry of Foreign Affairs of
the People's Republic of China
requests all civil and military
authorities of foreign countries to
allow the bearer of this passport to
pass freely and afford assistance in
case of need.*

李从猷

POCHNLI<<CONGXIN<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<
EG96972751CHN0104218F2908041MA00LENDOMKHA086



LIK ENTRY CLEARANCE

Place of Issue	UKVI 01
Number of entries	MULT
Type	D - STUDENT
Name	LI CONGXIN
Passport No	EG9697275

Valid from 20/09/24

026157034

Valid until 19/12/24
VAF 5665110
No

Sex F

Date of birth 21/04/01
Nationality CHN

Student Work limit 20hrs p/w term time SPX C5MQDFPD0
obsrv. No Public Funds

VDGBRLI<<CONGXIN<<<<<<<<<<<<<<<<<
EG96972751CHN0104218F2412193<<<<<<<



