

ANTS XV Proposal

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ANTS XIV, New Zoomland, July 2020



The Team



Jonathan Bober

Research group:
Number Theory

Advisors: Tim Dokchitser, Lynne Walling



Andrew Booker

Research group:
Number Theory



Chloe Martindale

Research group:
Cryptography

Why Bristol?

Why Bristol?

- Many leading algorithmic number theorists



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- Great facilities, including a new mathematics building



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- Great facilities, including a new mathematics building
- Good transport connections



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Why Bristol?

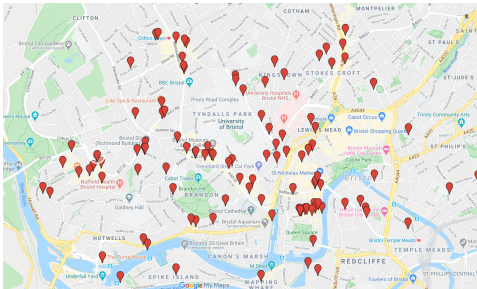
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- Great facilities, including a new mathematics building
- Good transport connections
- Great place to visit



Photo credit: Sion Hanuna

Why Bristol?

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- Good transport connections
- Great place to visit
 - plenty of quality pubs and restaurants



Pubs that Bober has visited

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 - decent weather in July and August



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- Good transport connections
- Great place to visit
 - plenty of quality pubs and restaurants
 - decent weather in July and August
 - large parks near the university



You can climb this tower

Why Bristol?

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- Great facilities, including a new mathematics building
- Good transport connections
- Great place to visit
- Experience hosting major conferences in the recent past:
 - CMI-HIMR Summer School in Computational Number Theory
 - HIMR Perspectives on the Riemann Hypothesis
 - British Mathematical Colloquium (~ 250 participants)
 - Building Bridges: 2nd EU/US Workshop on Automorphic Forms



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- Great place to visit
- Experience hosting major conferences in the recent past:
- ANTSS has never been held in the UK!



Algorithmic Number Theory at Bristol

- Bristol is a leading centre for number theory and cryptography
- ~ 35 members of staff and students
- One weekly post-quantum cryptography seminar and two weekly number theory seminars attracting speakers worldwide
- Co-PI (with Warwick) of the EPSRC programme grant supporting the LMFDDB, June 2013–Sept 2019
- Related groups in dynamical systems, random matrix theory, combinatorics, quantum information theory, cybersecurity, . . .
- Synergistic links with the Heilbronn Institute and related researchers

Facilities

- The largest room in the Fry Building seats 169 people



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- Good chalkboards and lecture recording facilities



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Facilities

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- Good chalkboards and lecture recording facilities
- Many great common areas
- and lots of smaller rooms and discussion areas around



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Travel to Bristol

Bristol is well connected by both air and rail in Europe

- 2 Hours from Heathrow and Birmingham airports
- Direct flights to Bristol from major airports such as Amsterdam Schiphol, Paris Charles de Gaulle and Dublin
- Direct flights from many other locations in Europe also
- Direct train to London, which is connected by high-speed rail to Paris, Brussels, and Amsterdam



Image credit: Nilfanion, CC BY-SA 3.0

Direct flights between Bristol and Europe ¹

Innsbruck Salzburg Vienna Bourgas Sofia Fuerteventura Gran Canaria
Lanzarote Tenerife Dubrovnik Pula Split Larnaca Paphos Prague
Copenhagen Enontekiö Ivalo Kittilä Rovaniemi Bergerac Béziers Biarritz
Bordeaux Brest Chambéry Grenoble La Rochelle Limoges Lyon Marseille
Montpellier Nantes Nice **Paris** Toulouse Berlin Cologne Gibraltar Athens
Corfu Crete Kefalonia Kos Preveza Rhodes Santorini Skiathos Thessaloniki
Zante Budapest Reykjavik Bologna Brindisi Catania Milan Naples Pisa
Rome Turin Venice Verona Kaunas Malta Luqa **Amsterdam** Gdansk
Katowice Krakow Poznan Rzeszow Warsaw Wroclaw Portugal Faro Lisbon
Madeira Porto Romania Bucharest Sardinia Olbia Alicante Almeria
Barcelona Bilbao Girona Ibiza Madrid Majorca Malaga Menorca Murcia
Reus Seville Valencia Basel **Geneva** Turkey Antalya Bodrum Dalaman

¹Disclaimer: this comes from the Bristol airport website, which seems to exaggerate a bit. Many of these flights, if they exist, are only once a week.

Potential funding



Significant support for travel, catering, conference dinner



Clay Enhancement and Partnership Program



Unspent funds from ANTS XIV

MailOnline

Bristol University plans to review its logo featuring Edward Colston after BLM protesters toppled slave trader's statue and dumped it in city's harbour

- Vice-chancellor Hugh Brady said racism is 'still very much part of everyday life'
- But he said that he was looking to play an 'active' part in stamping it out at Bristol
- The crest shows Colston and some of institution's buildings have links to slavery



Photo credit: Caitlin Hobbs, CC BY 3.0

- In Bristol, the statue of a slave trader was torn down and thrown in the harbour
- The movement has kindled new action on anti-racism throughout Bristol
- Some university-wide attempts to initiate change so far:
 - Recently appointing a Professor of History of Slavery, Prof. Otele, who:
 - raises city-wide awareness of our past
 - shapes university race equality measures
 - Reviewing building names and logos
 - Ethnicity Pay Gap Report; acting on that
 - Establishing a BAME Staff Network
 - Launching an apprenticeship talent pipeline to drive ethnic diversity
 - Working with schools, colleges, and local community groups

When?

- The ICM will be from July 6 to 14, 2022
- We expect that the Bristol Balloon Fiesta will be held the second week of August
- So we propose that ANTS XV be held from August 1 to 5, 2022 at the University of Bristol



Photo credit: Sion Hanuna