𝕿𝖍𝖊 𝕯𝖆𝖎𝖑𝖞 𝕲𝖗𝖔𝖚𝖕 𝕿𝖍𝖊𝖔𝖗𝖎𝖘𝖙

University of St Andrews

Welcome to day 4

Building and rooms are the same as ever.

Today's Talks

Day outline

9:30 Liebeck 2; 10:30 Coffee; 11:00 Contributed talks; 12:30 Lunch; 13:30 Excursion; 18:00 Dinner

Contributed talks

11:00 – 12:30, Maths Lecture Theatre A
Chair: Izabela Malinowska
Daniel Lytkin, *Large element orders and the characteristic of finite simple symplectic and orthogonal groups*
Jan Krempa, *On some numerical invariants of finite groups*
Natalia Makarenko, *Finite groups with a metacyclic Frobenius group of automorphisms*

11:00 – 12:30, Maths Lecture Theatre B
Chair: Ben Fairbairn
Antonio Beltrán, *A generalisation on the solvability of finite groups with three class sizes for normal subgroups*
María José Felipe, *The influence of p-regular class sizes on normal subgroups*
Robert Shwartz, *Counting cyclic indentities in specific finite groups*

11:00 – 12:30, Maths Lecture Theatre C
Chair: Collin Bleak
Jim Belk, *Thompson-like groups acting on Julia sets*
Francesco Matucci, *Embeddings into Thompson's group V and co-CF groups*
Nathan Corwin, *A non-embedding result for R. Thompson's group V*

11:00 – 12:30, Maths Lecture Theatre D
Chair: Stephen Glasby
Antoine Nectoux, *The essential rank of the alternating group*
Raffaele Rainone, *Geometric actions of classical algebraic groups*
Andrew Douglas, *Classification of embeddings of abelian extensions of D_n into E_{n+1}*

Updates to the week's schedule

There are no further changes, apart from the ones previously advertised: Daria Lytkina will speak at 11:30 on Friday 9th in Maths B under the title *On groups with given spectrum*.

Lists, Slides and Privacy

The organizers are planning to compile a (paper only) list of participants with their email, that will be distributed on Thursday. If you **do not** want to appear on this list you need to tell the organizers (preferably by replying to the email you got about this) **no later than this morning** that you would like to be not listed.
PDFs of all speakers slides will be put on the conference web pages (at a URL to be announced), unless a speaker objects. Please inform the organizers (by the end of Thursday) if you would like your slides **not** to be made available this way.

Conference excursions

For the excursion this afternoon there is a choice between visiting Falkland Palace, the town itself and a coffee shop, or going for a walk.
Buses will pick you up after lunch at 13:30 **sharply!** at the front door of Blackadder Hall, buses return at 17:00 from Falkland and will drop you off again at Blackadder Hall in time for dinner. (Arrangements will be made for appropriate drop-off/pick-up for the one-way hike.)
If you are staying at Macintosh Hall it will be hard to return to your room between lunch and the bus departure. You should therefore plan to leave in the morning with what you plan to take on the excursion. Everybody who does not go for the walk will on entering the bus receive a little piece of paper suggesting a time to go to the Palace and a time to go for a coffee. This is to distribute people evenly over time. All costs for the bus trip, the palace entrance fee and a cup of coffee or tea with a scone or pancake are already covered by the conference fees.
The walkers will receive a small food/drink package to take along when they enter the bus.
Because of the high demand for walking, we are offering a choice of two walks.
The first walk will visit both West and East Lomond Hills. This is about 9km, with about 450 metres of ascent, finishing in Falkland for the bus home.
The second walk will visit East Lomond and then descend to Falkland, where we will join the Palace party at the tea shop. This walk is about 3km, with about 150 metres of ascent. If this is your preference, please let Peter Cameron or one of the organisers know in advance.
The current forecast for today: Partly cloudy with sunny intervals and no rain, afternoon temperatures around $13 - 14°$C (this is 55·4-57·2F in old money); wind speed of $3 \cdot 21869 - 4 \cdot 82803$kph (this is 2-3mph in even older money); probability of

precipitation $< 20\%$; humidity 84-91%; UV index 0-1 and air quality index 2 (see the met office website `http://www.metoffice.gov.uk` for more up to date information).

Book stalls

Friederike Dittberner from De Gruyter will be here on Thursday 7th and Friday 8th and Clare Charles from OUP on Friday 8th and Saturday 9th. They are both lovely people so do go along and chat to them!

Plan ahead! Talks Thursday 8th

Day outline

9:30 Reid 3; 10.30 Coffee; 11:00 Contributed talks; 12:30 Lunch; 13:30 Robinson; 14:30 Breuillard 3; 15:30 Tea; 16:00 Liebeck 3; 18:00 Dinner; 20:00 Musical Evening (Upper College Hall)

Contributed talks

11:00 – 12:30, Maths Lecture Theatre B
Chair: Rosemary Bailey
Bernardo Rpdrigues, *Some designs and binary codes preserved by the simple group* Ru *of Rudvalis*
Ben Fairbairn, *A model of computer memory*
Mark Ioppolo, *Neighbor-transitive codes in Johnson graphs*

11:00 – 12:30, Maths Lecture Theatre C
Chair: Dane Flannery
Alla Detinko, *Recent advances in computing with infinite linear groups*
Allen Herman, *Schur indices in GAP*
Delaram Kahrobaei, *Public key exchange using semidirect product of groups*

11:00 – 12:30, Maths Lecture Theatre D
Chair: Derek Robinson
Ben Martin, *Algebraic groups and completely reducibility*
Adam Thomas, *G-reducible subgroups of the exceptional groups*
Stephen Glasby, *Tensor decomposition, Jordan canonical forms, and Clebsch-Gordon coefficients*

Additional Information

We will only be running the conference desk in the Physics Foyer during all the breaks and before the first talk from 9:00 onwards. Near the desk are poster boards with full abstracts. Abstracts can also be viewed via the conference website `http://www.groupsstandrews.org/2013/index.shtml`, and there's also a board with abstracts outside Theatre B of the Maths Department.

Kourovka Notebook

We have temporarily run out of copies. Ironically, there is no problem here - more are on their way!

Photos and Chat

For those of you who are Down With The Kids and do social media, the Facebook page for the conference is still at `https://www.facebook.com/events/539813526085443/`. Please feel free to upload photos, start discussions, and contribute mathematical problems!

Questions

(1) Is a finitely generated virtually free group hyperbolic? Please communicate all questions, comments and queries on this matter to Tony Gaglione or Dennis Spellman.
(2) Is the Hall Universal Group finitely presented or even finitely generated? Ben Fairbairn and John Britnell are slightly curious about this and several of us couldn't sort it out in the pub on Monday evening.

Plan ahead! Pub of the day

For those who take the most important aspects of this conference seriously, several elements of the group will be associating with each other this evening in *Aikman's* on Bell Street. According to their website `http://www.cellarbar.co.uk`, this week's real ales include the following.

Brewery	Name	Strength
Harviestoun	Bitter & Twisted	3·8%
Broughton	Greenmantle	3·8%
Stewart's	Pentland IPA	3·9%
Timothy Taylor	Bolt Maker	4·0%
Cairngorm	Trade Winds	4·3%
Inveralmond	Thrappledouser	4·3%
Hadrian	Coast to Coast	4·3%
Orkney	Dark Island	4·6%

Furthermore, their European Beers of the Month are Charles Quint (9·0%) and Karmelit Triple (8·0%). They also have a wide selection of whiskies and rums.