Please complete all sections of this reporting template and submit within 3 months of your event or activity taking place. This report will allow the SICSA Directors to provide detailed information about the progress of the SICSA Research Themes to the Pool funders, SFC, and your cooperation is appreciated.

Name of event organiser: Dr Mary Cryan

Email address: mcryan@inf.ed.ac.uk

Institution: University of Edinburgh

Title of event: Scottish Combinatorics Meeting

Location of the event: Edinburgh

Date of event: 26th and 27th April, 2018

From which SICSA Research Theme was this event funded? "Theory, Modelling and Computation"

Total funds claimed for event: £636.09 (from SICSA), the total from all funders was £3689.37

Please outline in brief what took place at the event, providing details of speakers and titles of talks:

The event took place at the University of Edinburgh, in the Informatics Forum, funded by GMJT, SICSA and BCC. We had 6 internationally known invited s peakers, who gave excellent talks on a range of topics in Combinatorics:

- Radu Curticapean, Saarland University - *The complexity of graph motif parameters*
- Iain Moffat, Royal Holloway, University of London - *The Tutte polynomial of a graph and its extensions*
- Steve Noble, Birkbeck University - *Embedded graphs and delta-matroids*
- Will Perkins, University of Birmingham - *Kissing numbers in high dimensions via a hard core model*
- Colva Roney-Dougal, University of St Andrews - *The generating graph of a finite group*
- Kristina Vuskovic, University of Leeds - *Algorithms for (theta, wheel)-free graphs*

We also asked for contributed talks, and there were 7 of these, including 3 from research students:

- Carl-Fredrik Nyberg Brodda, St Andrews (MSc student) - *Topics in Graph Pebbling*
- Peter Cameron, St Andrews - *Equitable partitions of Latin square graphs*
- Alexander Evetts, Heriot-Watt (PhD student)- *Growth of virtually abelian groups*
- Heng Guo, Edinburgh - *A polynomial-time approximation algorithm for all-terminal network reliability*
- William Pettersson, Glasgow (postdoc) - *Computational approaches to solving the cycle decomposition problem*

- Tomas Selig, Strathclyde (postdoc) - *Permutation graphs, tiered trees and the Abelian sandpile model*
- Elena Zamaraeva, Warwick (PhD student) - *On the specification number of threshold functions*

Please provide details of how many attended and if possible, information about which institutions were represented:

In total we had an attendance of 39 (this includes the 6 invited speakers). Apart from our 6 invited speakers (mostly based in England), the other attendees came from University of Edinburgh, University of Glasgow, University of St Andrews, Heriot-Watt University, Strathclyde University, Aberdeen University and University of Dundee, and the University of Warwick in the UK. Of the attendees, 2 were undergraduates, 3 were MSc students, 9 PhD students, and 4 postdocs, with the remainder of course being faculty.

Outcomes:

Please give details of any research papers that have come or are pending as a result of this activity:

It's a little bit soon to mention research papers. However there were a number of people discussing/collaborating during the meeting, including Kitty Meeks and Jessica Enright, Steve Noble and Iain Moffat, etc.

Please provide details of any grant applications that have come or are pending as a result of this activity:

None yet.

Please provide details of any further outcomes that have come as a result of this activity:

None yet.

Do you have any plans to bid for further SICSA Theme Funding in the future?

Yes. This was the 4th in a row of SCM meetings, and the first time it had been held in Edinburgh (in the past it took place in Glasgow university, and University of St Andrews). The Edinburgh location was successful as a central location which was easily commutable for everyone, this being especially important for a short 2-day event. Therefor we are planning to hold SCM in the same location again in 2019, and will be applying for funds to support that.