

AMSI workshop on Graph C^* -algebras, Leavitt path algebras and symbolic dynamics

R. Hazrat* and A. Sims**

The program

The workshop on Graph C^* -algebras and Leavitt path algebras was held at School of Computing and Mathematics, University of Western Sydney, 11–14 February 2013. The workshop was organised by R. Hazrat (UWS) and A. Sims (UOW) and was funded primarily by the Australian Mathematical Sciences Institute, with further support of the Australian Mathematical Society and University of Wollongong.

The aim of the workshop was to bring together Australian and international experts to develop the emerging connections between the traditionally disparate fields of abstract algebra and C^* -algebras and symbolic dynamics. The total of 19 talks were delivered, among them, 3 introductory talks by Gene Abrams (Colorado) on Leavitt path algebras and 3 parallel introductory talks by David Pask (Wollongong) on graph C^* -algebras. There were 25 participants, 10 of them overseas participants from China, New Zealand, Spain and USA.

The homepage of the workshop will be maintained at <https://sites.google.com/site/amsiuws2012/home/>, where all the presentations and notes are now online.

Talks

The following talks were delivered. For the abstracts and the complete beamer presentations, see the webpage of the workshop.

1. *Gene Abrams (Colorado)*
Leavitt path algebras: Introduction, motivation, and basic properties
Leavitt path algebras: Algebraic properties
Leavitt path algebras: Some (surprising?) connections
2. *David Pask (Wollongong)*
An introduction to graphs C^* -algebra: Lecture 1
An introduction to graphs C^* -algebras: Lecture 2
An introduction to graphs C^* -algebras: Lecture 3
3. *Pere Ara (Barcelona)*
Leavitt path algebras and graph C^* -algebras of separated graphs

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4. *Enrique Pardo (Cadiz)*
Symbolic dynamics in the classification of Leavitt path algebras: An overview
5. *Gonzalo Aranda Pino (Malaga)*
Kumjian–Pask algebras of higher-rank graphs
6. *Mercedes Siles Molina (Malaga)*
Centers of graphs algebras
7. *Iain Raeburn (Otago)*
Actions and coactions of groups on graph algebras
8. *Astrid an Huef (Otago)*
KMS states of C^* -algebras of finite graphs
9. *S. Paul Smith (Washington)*
Graded modules over path algebras of finite directed graphs, and Leavitt path algebras
10. *Aidan Sims (Wollongong)*
Higher-rank graphs and C^* -algebras
11. *Roozbeh Hazrat (Western Sydney)*
Weighted Leavitt path algebras
12. *Lisa Orloff Clark (Otago)*
Groupoids and Leavitt path algebras
13. *Michael F. Whittaker (Wollongong)*
KMS states for self-similar actions
14. *Adam Rennie (Wollongong)*
Aspects of Hochschild and cyclic homology for graph algebras

Participants

List of participants

An asterisk indicates a student participant.

Gene Abrams (Colorado); Pere Ara (Barcelona); Gonzalo Aranda Pino (Malaga); Lisa Orloff Clark (Otago); James East (Western Sydney); Attila Egri-Nagy (Western Sydney); Murry Elder (Newcastle); Andrew Francis (Western Sydney); Dean Kurtis Garden* (UNSW); Volker Gebhardt (Western Sydney); Roozbeh Hazrat (Western Sydney); Mitchell Hawkins* (Wollongong); Astrid an Huef (Otago); Hui Li* (Wollongong); Enrique Pardo (Cadiz); David Pask (Wollongong); Iain Raeburn (Otago); Adam Rennie (Wollongong); Stuart Serdoz* (Western Sydney); Mercedes Siles Molina (Malaga); Aidan Sims (Wollongong); Adam Sierakowski (Wollongong); S Paul Smith (Washington); Guoping Tang (Beijing); Michael F. Whittaker (Wollongong).