

Microtheses and Nanotheses provide space in the Newsletter for current and recent research students to communicate their research findings with the community. We welcome submissions for this section from current and recent research students. See [newsletter.lms.ac.uk](https://newsletter.lms.ac.uk) for preparation and submission guidance.

## Microthesis: Your Title Here

ANN AUTHOR

The abstract should be no more than 50 words. It should encourage the reader to delve further into the article. You should regard it as a “teaser” rather than a formal abstract.

### Special typesetting considerations

There are a few letters that do not appear in the font set that the *Newsletter* uses and require hacking. In particular,  $\acute{o}$  is created using `\fakHo` rather than usually `\H{o}`, and  $\acute{c}$  is created using `\fakdc` rather than `\'c`. Please let us know if you find a missing character!

For long quotations, please use `\begin{myquote}` `\end{myquote}` rather than the standard `\begin{quote}` `\end{quote}`

Please avoid custom formatting, and use italics and bold fonts sparingly.<sup>1</sup>

Links to websites should be inserted using `\href{https://www.lms.ac.uk}{lms.ac.uk}`, which will appear as [lms.ac.uk](https://www.lms.ac.uk). For longer urls please use [tinyurl.com](https://tinyurl.com/y5sy3h2t). For example, here is a link to the *Newsletter* website: [tinyurl.com/y5sy3h2t](https://tinyurl.com/y5sy3h2t).

### Audience and style

An article should be written in such a way so as to be enjoyed by all the members of the LMS. They should not be written for a subject specialist, but rather for a reader with a good understanding of mathematics. Most readers will not enjoy a highly specialised article, but everyone will value a well-written and approachable one.

Authors should keep in mind that substantial proportions of the society works outside of academia, are undergraduate or postgraduate students, or are based outside of the UK. Authors may find it helpful

<sup>1</sup>Footnotes should also be used sparingly.

to visualise a target reader as a mathematics PhD student in a different area from the to the topic of the feature.

### Expanding upon something

Boxes like this can be used to write an aside on some topic in the article. 15–20 lines is a good length for this. The boxes should be used for supplementary information and should not contain information that is essential to understanding the main body of the text. A quick test is to check that the feature would still make sense if the box was deleted.

It is good practice to use these boxes as a place to provide the more technical details of an article. The main body of the text can contain the “big picture” overview for the general reader, referring to the box (see “Expanding upon something”) for additional details if he or she wants them.

### Length

Micro-theses should cover exactly 2 published pages, and Nano-theses should cover exactly 1. Both should be prepared using the appropriate latex template.

Writing to strict page limits can be a challenge, but it is an enjoyable challenge!

### Images

The use of quality images and figures is strongly encouraged. Images should either be the full width of a column, or have 32mm width.

Authors are encouraged to submit images that are suitable for use as a cover image for the volume. These images need not be appear in the article but should be related to it. Cover images need to be of a quality of 300dpi or higher.

The author is responsible for obtaining all relevant permissions for image use.



Figure 1. A caption



Figure 2. A caption

## References

References should be used sparingly and kept to a minimum. An item should be referenced if and only if referencing serves an essential role in the article. It should be rare for more than 10 items to be referenced in an article.

References should be ordered by the alphabetical order of the authors. Within that, by date. The referencing format for the Newsletter is indicated in the examples below. Note that this format is generally consistent with references appearing in MathSciNet and so they can be copied from it. Some minor re-formatting may be needed though.

## Acknowledgements

Any acknowledgements and grant information should appear at the end of the article as an unnumbered section. Acknowledgements should only appear if there is a strong need for them, in which case they should be brief.

## Author profile

Features should end with a photograph and brief profile of each author. Please use high quality photographs. If you are unable to crop a photo to the correct size, please send a larger one and we will crop it. The author profile should include affiliation and research interests, but it should also include some additional non-work information. Author profiles should be written in third person.

## REFERENCES

- [1] The GAP group, GAP-groups, algorithms and programming, version 4.8.7, 2017, [gap-system.org](http://gap-system.org).
- [2] L. A. Goldberg, M. Jerrum, M. Paterson, The computational complexity of two-state spin systems, *Random Struct. Algorithms* 23 (2003) 133–154.
- [3] M. Mirzakhani, A. Wright, Full rank affine invariant submanifolds, Preprint 2016, [arXiv:1611.08339](https://arxiv.org/abs/1611.08339).
- [4] J.G. Oxley, *Matroid Theory*, Oxford University Press, 2006.
- [5] G. C. Rota, Combinatorial theory, old and new, in: *Proc. Internat. Cong. Math., Nice, Sept. 1970*, Gauthier-Villars, Paris, 1971, pp. 229–233.



## Ann Author

Ann is a lecturer in mathematics at Edinburgh Napier University. Her main research interests are in algebraic topology, but she also has a keen interest in mathematics education. Ann was born in Australia, and it remains her long-term ambition to learn the didgeridoo; her two dogs are less enthusiastic about this idea.