

## HOW TO FIND A TILING PATTERN

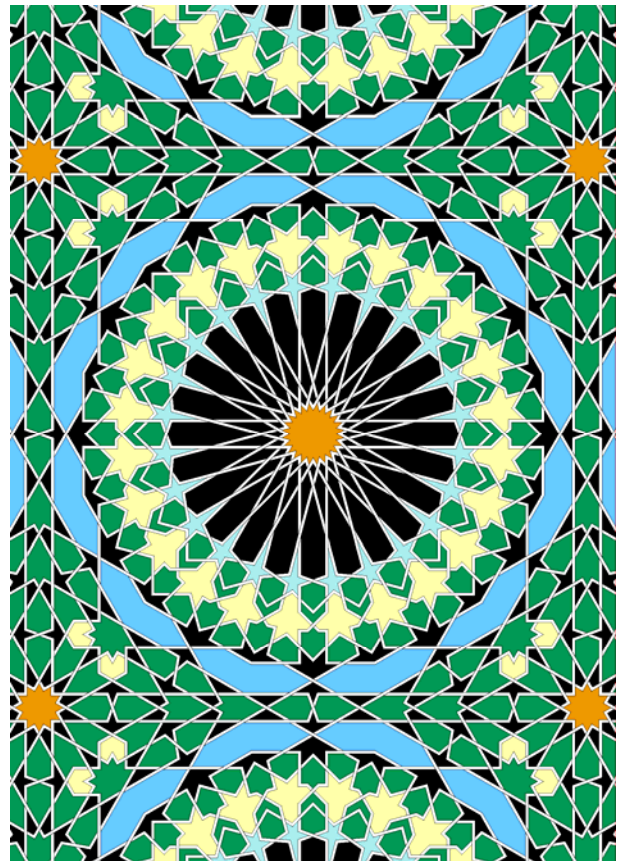
An LKL Maths-Art seminar by  
Brian Wichmann

Tuesday 10 June,  
6.00 – 7.30pm

London Knowledge Lab, WC1N 3QS

Brian Wichmann was inspired by the famous book *Tilings and Patterns* by Grünbaum and Shephard to construct patterns on the computer, and then he had the idea to compile an encyclopaedia of tiling patterns, as he found more and more books on the subject. This project developed into a CD-ROM and eventually into a website [[www.tilingsearch.org](http://www.tilingsearch.org)].

This talk will describe Brian's collection of over 1,000 patterns. Examples of the type of pattern in the collection are the ones in the Alhambra, consisting of tiles which are polygons – curves are not included. As well as providing a tour of the patterns, Brian will describe how he has organised the collection and how it can be used to locate a particular pattern based on its geometric properties. Given a large collection locating a specific pattern is not straightforward – many collections in books contain duplicates due to this difficulty. The talk will demonstrate the classification system and illustrate some of the issues. Another technical issue is graphical accuracy; many illustrations in books are poorly-drawn and care is needed to create accurate drawings for the collection. Also care is needed in generating the image of the pattern in a form suitable for downloading; even very high resolution bitmaps can distort the pattern!



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All welcome. No registration or ticket required, but an email to [lkl.maths.art@gmail.com](mailto:lkl.maths.art@gmail.com) is appreciated to assist with planning.

## **LKL Maths-Art seminar series**

Website and archive: [www.lkl.ac.uk/events/maths-art](http://www.lkl.ac.uk/events/maths-art)

This seminar is part of a regular series of maths-art seminars held at the London Knowledge Lab, usually on the second Tuesday of each month during term times. To receive email announcements about events, subscribe to the mailing list at [www.dcs.bbk.ac.uk/mailman/listinfo/lkl-maths-art](http://www.dcs.bbk.ac.uk/mailman/listinfo/lkl-maths-art).

We propose these seminars as explorations of the connections between "mathematics" and "art", where both terms are understood broadly: art implies visual art (painting, drawing, sculpture, computer graphics, video), architecture, music, textile art, literature/poetry (and others), and mathematics implies both mathematics as a discipline and the related disciplines in science and engineering for which mathematics is an essential means of expression and communication.

Next seminar: September, to be announced.

Seminars are normally video-recorded for viewing on the website.

The seminar organisers are John Sharp and Phillip Kent. We welcome your suggestions about speakers or topics for future seminars; email us at [lkl.maths.art@gmail.com](mailto:lkl.maths.art@gmail.com).

## **Getting to the London Knowledge Lab**

Nearest tube stations are: Holborn (Central, Piccadilly lines), Russell Square (Piccadilly line). Approximately 10-15 minutes walk from either station.

