EXHIBITION COSTS

The fee includes:
- Around 40 tiles, prints and a textile from the collections of the Ashmolean Museum.
- Transport from and return to Oxford, within a 120 mile radius
- Object labels and interpretation panels
- Object preparation and condition reporting
- Tour co-ordination by the Ashmolean Museum Registrar's Department
- A selection of 5 images for use in the venue's marketing and press

- Three VR interactives and a video for projection. Please note that the hiring venue will need to have a staff member present during exhibition opening hours to assist visitors with the VR. The exhibition can be modified to remove the VR element if required.

The following items and costs will be covered by the venue, as they arise:

- 'Nail to Nail' insurance
- Transport from and return to Oxford, outside a 120 mile radius
- Courier expenses

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DIMENSIONS

THE MATHEMATICS OF SYMMETRY AND SPACE

TOURING EXHIBITION

ASHMOLEAN

Developed in collaboration with Oxford University's world-renowned Mathematical Institute, this exhibition invites visitors to explore what it means to move in one, two, three and more dimensions.

Using stunning Islamic ceramics, Renaissance prints and contemporary woodcuts alongside virtual reality technology, visitors will embark upon a journey of discovery from ancient cultures into cutting-edge science.

The exhibition is the result of a ground-breaking collaboration between the Ashmolean Museum and Oxford University's Mathematical Institute which involved graduate students and post-doctoral researchers contributing to the exhibition concept, co-writing the texts and labels with curators, and, most importantly, providing a sound mathematical basis to the entire show.

⊕ A set of five tiles in the shape of stars and a cross, Kashan, 1262

Beginning with a look at the dimensions we may think familiar – one, two and three – the exhibition uses an embroidered textile frieze, with its infinitely repeating pattern, to illustrate the first dimension. A selection of beautiful Islamic tiles demonstrates two dimensional space and introduces various types of two dimensional symmetry, as well as the geometry of tessellation.

⊕ Embroidered Textile, Greece, 19th century

⊕Albrecht Dürer, The Draftsman with the Vase, woodcut, c. 1525

The third dimension is illustrated using woodcuts by Albrecht Dürer (1471–1528). Dürer used principles he learned from studying the classical geometry of Euclid to create a startling illusion of depth in the architectural settings of his woodcuts illustrating the Life of the Virgin.

The exhibition culminates with the challenge of conceptualising and visualising further dimensions. Using contemporary woodcuts by Christiane Baumgartner, the concept of time as the fourth dimension is challenged, and virtual reality headsets allow the visitor to enter the world of multiple physical dimensions by stepping into a parallel reality.

The VR interactive introduces visitors to the inhabitants of Flatland, a two-dimensional universe, and allows them to play with a hypercube, a four-dimensional object which cannot exist in our world.

⊕ virtual reality interactive in use