



## Geometry in the analysis and design of decorations in Islamic monuments

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### ABSTRACT

The symmetry of abstract decorations on Islamic monuments has been used to study and analyse this type of art with geometry.

For example, the discovery of the presence of the 17 crystallographic groups in the Alhambra of Granada, by José María Montesinos Amilibia and Rafael Pérez Gómez, was very celebrated in the 1990s. Recently there have been interesting news and controversies in this field, such as the appearance of quasi-crystals in a decoration of a medieval mosque in Iran. On the other hand there are new studies where geometry plays a crucial role in understanding how some of these decorations were constructed and this offers new points of view for study.

The aim is to review the works with the greatest impact in this field and to present some recent architectural or graphic design realizations inspired by the Islamic tradition but taking advantage of current techniques.



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