**Al-Khwarizmi Student Paper Contest**

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This proposal has two components:

1. Al-Khwarizmi Student Paper Contest
2. Clearing House containing materials for middle and high school teachers to be used in the classroom

**Component 1:**

Topic: Islamic/Arabic Mathematics, 8th-16th century

Eligible students: Undergraduate students

Goals:

1. Introduce students to contributions of the medieval Islamic Civilization to mathematics
2. Help disseminate research findings on primary source documents to the general public
3. Introduce Islamic Civilization[[1]](#footnote-1) to students in the US in a positive way through history of mathematics

To increase awareness of the contributions of Islamic Civilization to mathematics, the Mathematical Association of America HOM SIGMAA , is sponsoring a paper contest on contributions of Islamic/Arabic Scholars to Mathematics during the period 8th-16th century. Participation is open to any undergraduate student at a US college or university.

**Submission Rules**

Submission Period: November

All submissions will follow the submission rules set forth by HOM SIGMAA Student Paper contest. Judges will be HOM SIGMAA members who have a sufficient knowledge of Islamic mathematics to be able to adequately judge the entries.

**Contest Rules**

Eligibility: This paper contest is open to all undergraduate students in any educational institution in USA.

Papers will be judged by a panel of mathematicians on the content, the quality of writing and presentation, and the accuracy of information and data.

Paper Subject: can be on any topic in mathematics or geometry during the period from the 8th to the 16th century (inclusive) including but not limited to

* Contributions of a scholar from the Islamic World to mathematics during such period
* Any Islamic/Arabic mathematics topic from this period
* Contributions of multiple Islamic/Arabic scholars to a given subject/topic in mathematics in this period
* Connections of Islamic/Arabic Mathematics and the Arts
* Connections of Islamic/Arabic Mathematics and Architecture
* Influence of Islamic/Arabic Mathematics on other civilizations

Winning submissions will be chosen, if any, with the following awards:

**Prize:** One-year membership to the MAA and HOM SIGMAA, and a history of mathematics book.

This will be paid for by the contest organizers directly.

Winning papers will be submitted to the MAA Convergence for possible publication.

**Evaluation:** The context will launch in the Fall of 2023. After three years, the HOM SIGMAA executive will evaluate the program and determine if and to what extent the contest will continue.

**Component 2:**

The second part of this proposal is to create a webpage on the HOM SIGMAA website that provides links to educational resources on Islamic/Arabic mathematics that can be adopted by middle and high school teachers in their classroom. Such material can be lessons on a particular topic from such an era (8th-16th century) or an Islamic/Arabic mathematics history class in a box. Over time, this may lead to other activities at the middle school and high school levels. These resources will be provided to the HOM SIGMAA Electronic Resources Coordinator by the organizers.

1. We use the terms ``Islamic Civilization" and ``medieval Islamic Civilization" in a very broad sense. We are particularly referring to the medieval Islamic civilization for which the time period extends approximately from late 7th century to the 16th century (inclusive). Geographically, it spans a large region --from Spain to the west to China, and India to the east. Therefore, it encompasses much diversity in terms of languages, ethnicity, and cultures. It also contains many different political powers and organizations (such as Umayyads, Abbasids, Fatimids, al-Andalus, Seljuks, Ottomans, Safavids, and others). It was ethnically and religiously highly diverse in which individuals from many different backgrounds contributed to scientific knowledge and progress, being a Muslim was not a prerequisite for this contribution. Arabic was the language of science during this time period, and it has been the language of religious studies. Again we use the term in a very broad sense and in no way do we imply a monolithic culture or civilization. [↑](#footnote-ref-1)