



TSG 35 Role of ethnomathematics in mathematics education

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The aim of TSG 35 at ICME-13 is to gather mathematics educators interested in the issues connected with the role of Ethnomathematics in Mathematics Education. The application of ethnomathematical approaches allows us the opportunity to examine local knowledge systems and give insight into forms of mathematics used in diverse contexts and cultural groups. The pedagogical approach that connects this diversity of mathematics is best represented by a process of translation and elaboration of the problems and questions taken from daily phenomena. It is necessary to broaden the discussion of possibilities for the inclusion of an ethnomathematics perspective that respects the social diversity of distinct cultural groups with guarantees for the development of the understanding of different ways of doing mathematics through dialogue and respect. This group will have an opportunity to present current research and/or theoretical elaborations on these questions:

- What is the mathematical thinking developed by people in nontraditional and traditional academic-western contexts?
- How can mathematics education use information regarding this mathematical thinking that has developed outside schools to improve our understanding of the mathematics and mathematics teaching and learning in schools?
- How can a wider and socio-critical/cultural view of mathematics expand the possibilities for peace, prosperity, and elimination of discrimination?
- What has been done in terms of the research on the role of Ethnomathematics in Mathematics Education?
- What are current lines and approaches for new and relevant research?
- Ethnomathematics can be defined both broadly and narrowly. How do these many definitions influence/impact the ways in which Ethnomathematics is incorporated into formal educational settings?

- What impact does an appreciation of non-western cultural contexts and the mathematics relate to these diverse contexts have on Mathematics Education?
- What evidences are there, and how do we get more, that school programs incorporating ethnomathematical ideas succeed in achieving their aims for the mathematical education of learners and of their ethnomathematical aims?

The discussions surrounding these issues imply that ethnomathematics is an instrument to improve mathematical education where it has a role in helping us to clarify the nature of mathematical knowledge.

PROGRAMMED ACTIVITIES

July 26th, 2016

Tuesday

12:00h-13:30h

Room A – Opening Session

Theme: Pedagogical Actions of Ethnomathematics Program

Ubiratan D'Ambrosio (Brazil)

- 60 minutes for presentation, 20 minutes for discussion, and 10 minutes to summarize the session.

July 27th, 2016

Wednesday

12:00h-13:30h

Rooms A and B: Group Discussions – Parallel Sessions

- Three 20-minute paper presentations in each room, 20 minutes for discussion, and 10 minutes to summarize the session.
- Total: 6 paper presentations (3 paper presentations in each room).
- Papers must be submitted to TSG35 for the review process through the ICME-13 website.
- Papers not chosen to be presented in this regular session will be invited to present in oral communications or poster presentations attached to this TSG in other parts of the ICME-13 programme.
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July 29th, 2016

Friday

12:00h-13:30h

Room A: Symposia

Theme: Innovative Approaches in Ethnomathematics

Daniel Clark Orey (Brazil)

Ethnomodeling

Universidade Federal de Ouro Preto

Mariana Leal Ferreira (USA)

Human Rights and Ethnomathematics

San Francisco State University

- 30 minutes for each presentation, 20 minutes for discussion, and 10 minutes to summarize the symposia.

Room B: Group Discussions – Parallel Sessions

- Three 20-minute paper presentations in each room, 20 minutes for discussion, and 10 minutes to summarize the session.
- Total: 3 paper presentations.
- Papers must be submitted to TSG35 for the review process through the ICME-13 website.
- Papers not chosen to be presented in this regular session will be invited to present in oral communications or poster presentations attached to this TSG in other parts of the ICME-13 programme.

July 30th, 2016

Saturday

12:00h-13:30h

Rooms A and B: Group Discussions – Parallel Sessions

- Three 20-minute paper presentations in each room, 10 minutes for discussion, 10 minutes to summarize the session, and 10 minutes to closure the activities of the topic study group. Participants must meet in Room A.
- Total: 6 paper presentations (3 paper presentations in each room).
- Papers must be submitted to TSG35 for the review process through the ICME-13 website.
- Papers not chosen to be presented in this regular session will be invited to present in oral communications or poster presentations attached to this TSG in other parts of the ICME-13 programme.

TIMETABLE

July 26		July 27		
	Room A		Room A	Room B
Min	Opening Session	Min	Paper Presentations	
60	<i>Pedagogical Actions of Ethnomathematics Program</i> Ubiratan D'Ambrosio	20	Paper 1	Paper 4
		20	Paper 2	Paper 5
		20	Paper 3	Paper 6
20	Discussion	20	Discussion	Discussion
10	Summary	10	Summary	Summary

July 29			July 30		
	Room A	Room B		Room A	Room B
Min	Symposia	Paper Presentations	Min	Paper Presentations	
20	<i>Innovative Approaches in Ethnomathematics</i> Daniel Clark Orey Mariana Leal Ferreira	Paper 07	20	Paper 10	Paper 13
20		Paper 08	20	Paper 11	Paper 14
20		Paper 09	20	Paper 12	Paper 15
20	Discussion	Discussion	10	Discussion	Discussion
			10	Summary	Summary
10	Summary	Summary	10	<i>Closure</i>	