Womens committee of the Iranian Mathematical Society (IMS)

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Abstract

In this poster, we introduce the Women's Committee of The Iranian Mathematical Society. We, in particular, present programs and activities of this committee since its establishment.

Mulheres na Matemática

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Neste poster, vamos apresesentar várias das ações do projeto de extensão "Mulheres na Matemática"' desenvolvido na Universidade Federal Fluminense. Uma das ações é a criação do site: http://mulheresnamatematica.sites.uff.br/, que é o primeiro site brasileiro com o objetivo de trazer ao conhecimento da comunidade científica, em particular da comunidade matemática, a trajetória acadêmico-científica de mulheres na matemática, com seus desafios e conquistas. Entrevistas, vídeos e estatísticas são apresentadas no site. Uma outra ação importante do projeto é "Vamos à escola!", onde realizamos atividades com meninas do Ensino Fundamental e Ensino Médio, com a finalidade de estimulá-las a seguir a carreira de matemática ou áreas afins, como engenharia e computação. Historicamente, no âmbito mundial, a Matemática é uma profissão masculina [1]. No caso do Brasil, de acordo com o Instituto Nacional de Estudos e Pesquisa (Inep), nos últimos dez anos houve um aumento de cerca de 54% no número de mulheres brasileiras que se formaram em engenharia eletrônica, 45% nas formadas em engenharia de produção e 30% em engenharia química e engenharia civil. Mas quando olhamos para os números mais de perto, vemos que a parcela de mulheres nas chamadas 'ciências duras' ainda está longe de se equiparar à de homens. Se, nas ciências em geral, as mulheres já são 50% dos pesquisadores em atividade no Brasil, nas áreas exatas são apenas 30% e, nas engenharias, 26%, de acordo com o Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq)[2]. O número reduzido de mulheres nas Ciências Exatas e da Terra, em particular na Matemática, ajuda a perpetuar a diferença entre o número de homens e mulheres cientistas e implica numa perda inestimável de possíveis talentos. Assim, esperamos que nosso projeto colabore de alguma forma para reverter esta situação.

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About the II Meeting for Women in Math in Latinamerica.

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The II Meeting for Women in Math in Latinamerica was held between January 22 and 26, 2018, in Valdivia-Chile. The organization was in charge of "Colectivo de Mujeres Matemáticas en Chile".
In this poster we aim to give an overview of this activity. We will describe the activities that were carried out, the feedback we received from the participants and what we learned in the organizational experience.

Women in STEM, progress and prospects; the case of a Ghanaian University

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The problems posed by paucity of women in STEM careers in Ghana is not different from what exists in other countries. Women are grossly under-represented in science and technology and this is more evident in the physical than the biosciences. Ghana has ten public universities, eight technical universities, 74 private universities, proportion of female enrolment remains low and this is worse at the postgraduate level, especially in the physical sciences. This study considers postgraduate enrollment into STEM programmes in KNUST from 1997 and 2017. Trends show an increased enrolment in life sciences while Engineering and Mathematics related programmes lag behind.

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The Role of Women Mathematicians in Indonesia

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In this paper, we described the role of women mathematicians in Indonesia for improving their capacity on their contribution to society. As stated by Allyn Jackson in her paper at 2004 entitled "Has the women-in-mathematics problem been solved" , there is a statement that women do mathematics differently from men, especially in how they deal with competition and criticism. Furthermore, in daily life, Indonesian women mathematicians introduce and teach the topic of mathematics to the children or the student using so many different culture at each region in big country of Indonesia. So mathematics can be combined with culture as we called ethnomathematics as part of ethnoscience. We gave some example of using ethnomathematics for elementary school in Indonesia.

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The influence of the environmental factors on some famous female mathematicians success

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In recent years, women's participation in mathematics has increased, but the number of male mathematicians is still more than of women. It is indeed clear that women's participation in advanced mathematics is the benefit of societies. Despite the real barriers for women in sciences, history has witnessed influential women in mathematics. Hypatia (born c. 350-370; died 415 AD) is probably the first female mathematician who we know about. Hypatia lived in Ancient Greece in Alexandria. She was the daughter of Theon who was a philosopher and mathematician. After Hypatia, many famous female mathematicians have recorded in history such as Sophie Germain, Sofia Kovalevskaya, Emmy Noether,....
In 2014, Maryam Mirzakhani, an Iranian mathematician and a professor of mathematics at Stanford University who was the first and only woman to win the Fields medal in mathematics. The aim of this study is to investigate biography of some famous women in mathematics and determine the influence of environmental factors such as cultural, economic status, political on their success.

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Female Mathematicians in Turkey

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There is a huge difference between numbers of female professors and male professors in Mathematics in Turkey. This difference is not so noticeable at the level of undergraduate/graduate education and even at the early stages of the academic career in Mathematics. Another point is, there are national and international conferences held in Turkey and there are very few female invited speakers when compared with the male invited speakers. I will try to give these statistics in our country, Turkey. These surprising and sad facts motivated us to establish the Association for Turkish Women in Mathematics (TKMD) in 2012. In the Association, we are trying to provide a platform where female mathematicians can express themselves both professionally and socially. There are 4 events that are organized by our Association every year and are open to both national and international speakers and participants. I will try to give general information about these activities, also present what we had done since 2012 and our future activities as well.

CONTINUED FRACTION FOR PATRIARCHAL PRACTICES IN NIGERIA

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Patriarchy refers to a system of social relations that describes the position of the father as the head of the household. The supremacy of men over women led to the running of homes and most societal institutions by men. This is due to a few factors like religion, cultural norms and practices, gender-role socialization, marriage institution, that reinforce the subordinate status of women , Durosaro (2016). This has been the case in every part of the world especially Nigeria. Patriarchal attitude has affected some sectors of human development in Nigeria like education and politics. The effects of patriarchal attitudes on human development in Nigeria using continued fraction are analysed in this work. The result shows how women have been seen as incompetent as men.

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Actions to reduce the gender gap taken by the Equality and Gender Commission of the Mexican Mathematical Society

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In this poster we will highlight the diverse actions performed in Mexico in order to reduce the gender gap, since the creation of the Equality and Gender Commission (CEG) of the Mexican Mathematical Society (SMM), in November of 2013. We also describe briefly the current situation as for the inclusion of women in maths in our country.

In representation of the CEG we have attended and organized a plethora of events concerning this matters both nationally and internationally. In particular, our experience in Latin America provides evidence that the factors underlying the underrepresentation of women in math are similar for most of the south of the continent.

We?ve witnessed that some substantial progress has been achieved in raising awareness about the gender gap in mathematics in the last four years. As such, we believe that it is time to discuss further initiatives and actions to promote the closing of this gap.

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Femmes et mathématiques

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"Femmes et mathématiques" is a French association founded in 1987 which works with other such forces in and out of the country to promote gender equality in Mathematics in France. Through diverse programmes it aims at supporting professional women mathematicians and encouraging young women to study mathematics. This poster will present some indications of our aims and actions.

http://www.femmes-et-maths.fr/

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AWM ADVANCES!

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We describe the objectives, activities and achievements of the 5-year AWM NSF Advance Grant: "Supporting Careers for Women in Mathematics through Research-focused Networks."

The goal of this grant is to advance careers for women in the mathematical sciences by building strong research-based networks. A guiding principle is that systemic change occurs at the community level rather than through the accumulation of one-by-one individual changes. Thus we focus on building community and advancing women in a given research area as a whole. Individual members should benefit from participation in the network, but we measure impact by integrating over the whole. Our primary goal is to increase the percentage of women's participation in the mathematics research community from roughly 10% to 30% within 10 to 15 years. Representation can be measured in many ways, for example by examining the percent of women among tenure stream faculty at research universities; participants in research programs at the NSF Math Institutes; PIs on NSF grants; invited speakers at major research conferences, and editorial board positions at leading research journals.

Built on the model of the successful Women In Numbers (WIN), a research network for women in number theory, in existence since 2006, the AWM ADVANCE Project has fostered eight new research networks to date. An additional eight research networks are in formation, thus spanning a total of 17 different research areas. Activities include Research Collaboration Conferences for Women follow-up activities at AWM workshops at national math meetings, & AWM Research Symposia and proceedings in the AWM Springer Series.

A social scientist is conducting a study of how participation in these research networks influences women's careers and their representation and visible leadership in the research areas. Results from survey-based assessments of network activities and interactions, in addition to preliminary results based on archival data will be presented.

A PORTRAIT GALLERY OF AFRICAN WOMEN MATHEMATICIANS
Marie Françoise Ouedraogo

Abstract: The poster is a presentation of a booklet of portraits of African Women Mathematicians. It is a project of AWMA aiming to create and update a database of role models of African Women Mathematicians for the AWMA website. This portal will aim at motivating and stimulating young girls for mathematical careers.

An invitation to the 'hall of fame'. On the trails of women among ICM speakers

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Ever since its inaugural celebration in 1897, the International Congress of Mathematicians (ICM) has signified the greatest effort of the mathematical community to establish international communication and connection across all mathematical topics. Through history, the ICMs have hosted some of the most prominent mathematicians of their time. Needless to say, receiving an invitation to present a talk at an ICM is is a matter of high international reputation, often compared with the entrance into a "hall of fame for mathematics".

Women mathematicians attended the ICMs from the start. With the invitation of Laura Pisati to present a lecture in 1908 in Rome and the plenary talk of Emmy Noether in 1932 in Zurich, they entered the grand international stage of their field. At the ICM in 2014 in Seoul, Maryam Mirzakhani became the first woman to be awarded the Fields Medal, the most prestigious award in mathematics. In our poster we dive into assorted data sources to follow the footprints of women among the invited speakers, visualizing their demographics and topic distributions, and providing glimpses into their diverse biographies.

Women in mathematics in the Netherlands

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The poster depicts the most recent information (2014) on the number of women in the mathematical departments in the Netherlands. It also offers a summary of the number of women across all sciences in the country in 2017. Last, it lists some current actions to promote diversity on a national level, and some past and future activities of the local association of female mathematicians.