

2ND AGYA MATH OLYMPIAD CAMP

23 to 25 November 2017

Texas A&M University at Qatar, Lecture Hall 238
Education City, Doha, Qatar

International AGYA Panel Discussion

MATHEMATICS AND INTERNATIONALIZATION: INNOVATIVE APPROACHES IN RESEARCH AND EDUCATION

26 November 2017, 4-6pm

Texas A&M University at Qatar, Lecture Hall 238
Education City, Doha, Qatar



ABOUT THE AGYA MATH OLYMPIAD CAMP

2ND AGYA MATH OLYMPIAD CAMP

23 to 25 November 2017
Texas A&M University at Qatar, Lecture Hall 238
Education City, Doha, Qatar

The 2nd AGYA Math Olympiad Camp in Doha/Qatar continues to provide young participants with an outstanding opportunity to engage in mathematical activities and foster their talents. Solving challenges by learning new problem-solving techniques and mathematical concepts is at the heart of the camp and serves as an ideal preparation for international math competitions, such as the International Mathematical Olympiad (IMO). The IMO is one of the oldest and most respected international competitions for young talents. The training during the camp is provided by experts from Germany and Qatar with ample experience in national and international math competitions and Olympiads.

It is the aspiration of AGYA's 2nd Math Olympiad Camp in Doha to guide the high school students not only to developing new skills and reaching the next level of mastering mathematics but also to gaining valuable experiences in mathematical competition. The internal competition during the camp serves as an excellent training field for students who wish to engage in international math competitions. Participants gain precious insides on how to deal with problems that are tested in international math competitions.

The 2nd AGYA Math Olympiad Camp of 2017 takes place from 23 to 25 November and is hosted by Texas A&M University at Qatar. It is a project of the Arab-German Young Academy of Sciences and Humanities (AGYA) and serves as an excellent platform for productive interaction between students, trainers, teachers and university professors from Qatar and Germany. The continuation of this concept will further strengthen the scientific cooperation and societal rapprochement between Qatar and Germany. All participants who conclude the full program will receive certificates.

The AGYA Math Olympiad Camp is initiated and organized by AGYA member Ahmad El-Guindy together with his fellow colleagues Andreas Fischer, Laith Al-Shawaf, Kalman Graffi and Vanessa Lux.

IMPRESSIONS FROM THE 1ST AGYA MATH OLYMPIAD CAMP



Everyone who successfully participates in the camp receives a certificate.



In the problem-solving sessions the young math talents are trained individually.



Ahmad El-Guindy, AGYA member and Associate Professor of Mathematics, Texas A&M University at Qatar, with the young math talents during a problem-solving session.



MEET OUR GERMAN TRAINERS AND LOCAL PROFESSORS

Martin Drees

University of Bonn, Germany

Martin Drees studies mathematics at the University of Bonn, Germany. As a high school student he took part in many different national and international math competitions as well as training programs. In 2016 and 2017 Drees has won a silver and a bronze medal at the International Mathematical Olympiad (IMO). Furthermore he has helped organizing local training seminars to train younger students and therefore is well experienced in preparing students for international math competitions.

Prof. Dr. Ahmad El-Guindy

Texas A&M University at Qatar, Qatar, AGYA member and member of the AGYA Steering Committee, AGYA Co-President

Prof. Dr. Ahmad El-Guindy holds the position of Associate Professor of Mathematics at Texas A&M University at Qatar and the Cairo University. He earned his PhD from the University of Wisconsin-Madison on the topic of theory of numbers in 2004. Prof. Dr. El-Guindy is member of the American Mathematical Society and Egyptian Mathematical Society. He is very interested in raising awareness for the social relevance of mathematical education and enhancing the skills of young math talents beyond school. One of his aims as a member of the Arab-German Young Academy of Sciences and Humanities (AGYA) is to introduce young Arab students to activities such as the International Mathematical Olympiad (IMO).

Prof. Dr. Mohamed Elgindi

Texas A&M University at Qatar, Qatar

Prof. Dr. Mohamed Elgindi has been Instructional Professor at Texas A&M University at Qatar since 2011. He graduated in mathematics from Michigan State University in 1987. His research interests are in the fields of numerical analysis as well as numerical and analytical solution of physical problems. He has received several honors for his research activities from the U.S. National Science Foundation, University of Wisconsin-System Applied Research and University of Wisconsin-Eau Claire Internal Research.

Branko Juran

University of Bonn, Germany

Branko Juran studies mathematics at the University of Bonn, Germany. Juran won the German 'Bundeswettbewerb Mathematik' four times. He took part in the International Mathematical Olympiad (IMO) in Hong Kong in 2016 and Rio in 2017, where he both times won a bronze medal.

Prof. Dr. Nordine Mir

Texas A&M University at Qatar, Qatar

Prof. Dr. Nordine Mir has been Professor at Texas A&M University at Qatar since 2013. In 2003, he completed his post-doctoral studies in mathematics at the University of Rouen Normandy in France. Prof. Dr. Mir worked as Professor at the University of Rouen until his current position in Qatar and held the Chair of the Mathematics Research Department of the university. His interest areas are several complex variables, algebraic and analytic geometry and partial differential equations.

Florian Schweiger

University of Bonn, Germany

Florian Schweiger studied mathematics at the University of Bonn, Germany and the University of Toronto, Canada. Since 2016 Schweiger has been a PhD student at the University of Bonn. As a student he participated in various national and international mathematical competitions and won a silver and a bronze medal at the International Mathematical Olympiad (IMO) in 2010 and 2011. Now he is one of the coaches of the German IMO Team. Schweiger also was the deputy leader of the German team at the Middle European Mathematical Olympiad (MEMO) in 2017.

About AGYA

The Math Olympiad Camp is a project of the Working Group "Arab and German Education" of the Arab-German Young Academy of Sciences and Humanities (AGYA) and is hosted by Texas A&M University at Qatar.

AGYA brings together excellent Arab and German scholars to face shared challenges and develop solutions through research cooperation. The Arab-German Young Academy of Sciences and Humanities (AGYA) at the Berlin-Brandenburg Academy of Sciences and Humanities (BBAW) provides partnership-building opportunities and funding to support the innovative projects of its members in various fields of research as well as in science policy and education. More than 50 members – in equal number Arab and German scholars – have been selected to join AGYA since 2013, who have realized joint projects and initiatives in the framework of six interdisciplinary Working Groups: Arab and German Education; Common Heritage and Common Challenges; Energy, Water and Environment; Health and Society; Innovation; and Transformation.

The Math Olympiad Camp is initiated and organized by AGYA member Ahmad El-Guindy together with his fellow colleagues Andreas Fischer, Laith Al-Shawaf, Kalman Graffi and Vanessa Lux.

SPONSORED AND
SUPPORTED BY:



SPONSORED BY THE



HOSTED BY:



**'Mathematics is
to me a source of
inspiration, joy and
fulfillment.'**

Ahmad El-Guindy

Professor for Mathematics at Texas A&M
University at Qatar,
AGYA Co-President



Keynote Speech “Mathematics as a driving force of social development”

Prof. Dr. Dr. h.c. mult. Martin Grötschel

President of the Berlin-Brandenburg Academy of Sciences and Humanities (BBAW),
AGYA Advisory Board Co-Chair

Mathematics has, for thousands of years, always been conceived as one of the most challenging endeavors of the human mind. This is still the case. In the last ~150 years mathematics has increasingly become a body of knowledge that other sciences can use as a toolbox for the formulation, understanding, and solution of their own problems. During the last ~50 years mathematics has “invaded” industry and developed “machinery” that has made production and business more efficient, profitable and safe, i.e., mathematics contributes significantly to competitiveness. Can mathematics also drive social development? In his lecture Professor Grötschel will briefly describe some examples of this kind and explain some surprising observations.

Prof. Dr. Dr. h.c. mult. Martin Grötschel has been President of the Berlin Brandenburg Academy of Sciences and Humanities since 2015. He studied mathematics and economics at Ruhr University Bochum (1969-1973), obtained his PhD in 1977 at University of Bonn, was mathematics professor at University of Augsburg (1982-1991) and at TU Berlin (1991-2015) as well as Vice President (1991-2012) and President (2012-2015) of the Zuse Institute for Information Technology Berlin. He was President of the German Mathematical Society (1993-1994), Secretary of the International Mathematical Union (2007-2014), chaired the DFG Research Center MATHEON “Mathematics for Key Technologies” (2002-2008).

His scientific awards include the Leibniz, the Beckurts, the Dantzig, the Fulkerson, and the John von Neumann Theory Prize. He is a member of five scientific academies, including NAE (USA) and CAS (China) and holds four honorary doctoral degrees.

The keynote speech will be followed by a panel discussion with high-ranking scholars and experts from Qatar and Germany.

The keynote speech will be followed by a panel discussion with high-ranking scholars and experts from Qatar and Germany.

Cynthia Bolton

M. Ed., District Coordinator of Gifted Programs for the Qatar Foundation (Qatar)

Mehdi Benchaabane

M. Ed., Director of the Education Development Institute, a member of Qatar Foundation (Qatar)

AUawhara Hassan Al Thani

M. Ed., School Culture Coordinator, Pre-University Education, Qatar Foundation, (Qatar)

Prof. Dr. Rainer Kaenders

Mathematical Institute of the University of Bonn (Germany)

Prof. Dr. Matthias Ludwig

Institute of Mathematics and Computer Science Education, Goethe University Frankfurt (Germany)

Moderator:

Ahmad El-Guindy

AGYA Co-President, Texas A&M University at Qatar (Qatar)

► MUSIC

Math Songs by German YouTube-Star DorFuchs (Johann Beurich), TU Dresden

► AWARD CEREMONY

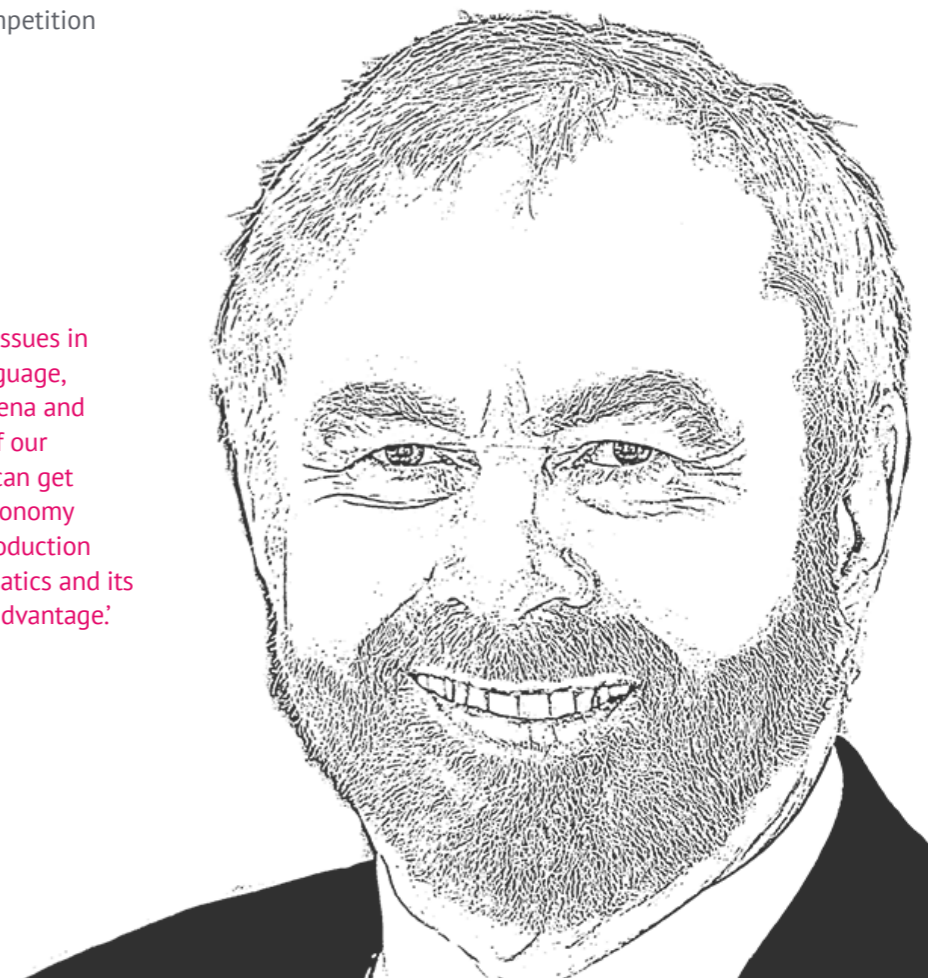
Announcement of the results of the math competition of the 2nd AGYA Math Olympiad Camp

‘Mathematics is to me

a language which allows expressing complex issues in a precise and accurate way. It is not only a language, but also an instrument to understand phenomena and processes and, thus, facilitates many aspects of our life. Nowadays hardly any scientific discipline can get along without mathematics. In industry and economy mathematics has more and more become a production factor, and having good knowledge of mathematics and its applications leads to substantial competitive advantage.’

Martin Grötschel

President of the Berlin-Brandenburg Academy of Sciences and Humanities (BBAW)





Arab-German Young Academy of Sciences and Humanities (AGYA)
at the Berlin-Brandenburg Academy of Sciences and Humanities (BBAW)
Jägerstr. 22-23
10117 Berlin
Germany

Website: www.agya.info

Twitter: [@AGYA_events](https://twitter.com/AGYA_events)

Facebook: www.facebook.com/agya.info