AKSF NEWSLETTER

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Association Kangourou Sans Frontières
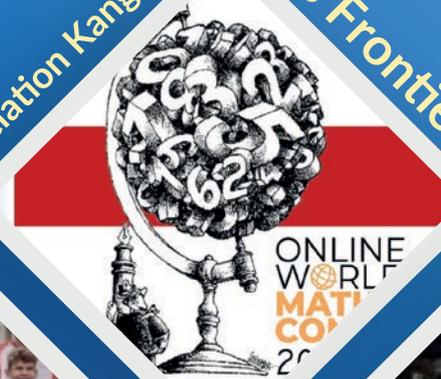
Joanna Matthiesen

Hello and welcome to our sixth
Kangourou sans Frontières Newsletter

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Hello and welcome to our Kangourou sans Frontières Newsletter.

I am delighted to write again in already our 6th AKSF newsletter. Thank you to all AKSF members who helped with newsletter ideas and material. I value the most the personal connection and talking face-to-face when possible, as this when things happen, relationships start, and great ideas and topics come up. It was so nice to see everyone in Italy – didn't we all have a great time? Thanks, Angelo, for hosting the last AKSF conference. My favorite moments at the conference were the conversations during our question selections, the fellowship we enjoyed over the many delicious Italian meals, and the amazing weather each and every day.

Kangaroo Day this year happens to be March 16, which is close to the International Mathematics Day. We are only two days apart from the March 14th Math Day. Did you know that March 14 is already celebrated in many countries as Pi Day? It is because this date is written as 3/14, and the mathematical constant Pi is approximately 3.14. So, this day is all about mathematics and I can safely say it continues into our International Event of Kangaroo Competition. This year, the theme of the International Day of Mathematics is "Mathematics for a Better World". On the occasion of International Day of Mathematics 2021, Audrey Azoulay, Director-General of UNESCO in an official statement said, "Mathematics, with its many technical applications, now underpins all areas of our lives".

Joanna Matthiesen
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International Day of Mathematics was recognized by the United Nations Educational, Scientific and Cultural Organization (UNESCO) during its general conference in 2019. Before this, the day was marked as Pi Day. The day was first celebrated in 1988 after Physicist Larry Shaw. Moreover, mathematician and physicist, Albert Einstein was also born on this date, March 14, in 1879.

The AKSF organization makes an effort to advance the outreach of Kangourou sans Frontières throughout the world. Learning mathematics may change the way students think and help them observe how math is interwoven into the other disciplines they study.

Wishing all of you a wonderful Kangaroo Day 2023. We plan to write again in June. Let me know if you have a topic to bring to our attention.

Any questions, suggestions, or concerns? Please address them to me directly, joanna@mathkangaroo.org. I hope to hear from you soon, and I welcome your feedback.

Sincerely yours in the Spirit of Math Kangaroo,

Joanna
AKSF Newsletter Editor in Chief

News from The President

M e i k e   A k v e l d

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Dear Kangaroo friends,

It is as always, a great pleasure to write an article for our AKSF Newsletter. I am so pleased that again we managed to get a great collection of wonderful and interesting articles. I hope you all started well in the New Year and although winter has arrived here in Zurich, I am remembering the sunny days in Cervia. We worked hard together and I am very happy about the great problems we selected and which are – at the moment of writing - in the process of being translated in so many languages, and which will – in March – be enjoyed by so many children worldwide.

Did you notice that the proposing countries were mentioned in the PDF with the solutions? Perhaps you want to use this information somewhere in or around the competition in your country. It once more shows the internationality of our competition and also the common spirit and passion to produce beautiful mathematics. Thank you to 63 countries that proposed questions for the 2023 Kangaroo contest. The Kangaroo 2023 sets represent questions from 38 different countries. Mathematics unites!

Here a few things that were set up since our Fall meeting:

•   We have created a public website http://www.aksf.org/publications.xhtml where members can share links to articles they have written about Kangaroo. Please let us know if you have any papers that should be added here. We hope to establish this site as a site with lots of interesting findings about our competition.

• As we announced in Cervia we will set up a fund to collect money to support members with financial difficulties. It will be called AKSF4D and the money donated here will be used to support members to attend our meetings. More infos about how to apply for financial support will follow in a later Email.

• As announced at the Annual Meeting we have set up an WhatsAppGroup for Country representatives. We will use this to inform you about important mails that have been sent or deadlines that are coming up. If you haven't joined us yet, you can use the following link to join the group https://chat.whatsapp.com/HkVVPFjJTsnGE HcUafiMPP

• I think we all very dearly remember the visit of Valentina Dagienė, the president of the Beaver competition. We share so many common goals that it would be wonderful to see many questions in our (and their) competition about beavers and kangaroos - ideally collaborating with and not competing against each other :-)

So what happened since our Fall meeting? First of all, the problems we selected were finalised. Thanks a lot to all who made this happen. It's a lot of work, it happens behind the scenes, and we should all be very grateful to those people who do this job.

THANK YOU!

We had some membership inquiries; right now, we are talking to Sri Lanka and Lebanon and some countries in Africa have also shown some interest. Please help us to spread Kangaroo all over the world. I am convinced that Kangaroo can help to make education better and I am also convinced that better education for all will eventually lead to a better world for all.
Our board members are supporting our new and provisional members to run the competition in their countries. We are looking forward to hear from them, and to learn from them.

I assume we are all in the process of preparing the Kangaroo 2023 competition and I really hope none of us will be effected by Covid again.

And of course the North Macedonian Team (supported by Matjaz regarding IT issues) is working hard on the Annual Meeting 2023.

Let me finally use this opportunity to thank all authors who contributed with articles and in particular Joanna and Özgür and his team who make everything work. Thanks a lot!
And please do not hesitate to contact Joanna if you think you have something to write about, or even if you are not sure and want to discuss it with Joanna. We are always looking for interesting articles and in an Association as big as ours it is not always possible to talk to everyone, but the Newsletter allows everyone to read about what others are doing and perhaps inspires, starts a conversation, collaboration, or who knows…..

Take care and stay healthy!
Yours,
Meike
AKSF President

HAVE SOME MATHS!

S t e p h a n i e   P e l l e t
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For more than three decades now, the Swiss Federation of Mathematical Games, also known as FSJM, was founded by mathematics enthusiasts and is a non-profit organization. Along with other mathematical federations, especially the French Mathematical Federation, around Europe and even beyond, the same passion for mathematical games is shared and promoted through an annual championship. FSJM's main goals are to introduce the math and logic games championship, promote the reputation of mathematics among the public and detect young talents in order to encourage them to pursue scientific studies.

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FÉDÉRATION SUISSE
DES JEUX MATHÉMATIQUES

This international championship allows thousands of children, students and adults to take part in a fun mathematical competition that gathers contestants from many countries all over the world.

Divided in 8 categories according to the age and expertise of the contestant, the championship groups mathematical problems in various fields such as geometry, arithmetic or space. The problems are to be solved in limited time and without calculator. Here are 2 examples of problems:

1.   COMBINATION LOCK (coefficient 8)
Alex has a combination lock whose 4-digit code, represented as ABCD, is such that:
° A is twice B
° The sum of B and C is equal to 13
° The sum of A and B is equal to the sum of C and D.
What is the code for this padlock?

2.   JUST THREE LETTERS (coefficient 7)
 MAI
+MIA
=AIM
In this cryptarithm, the same letter always replaces the same digit, and different letters always replace different digits.
What is the number represented by MAI+MIA=AIM?

Traditionally, the championship starts with individual and school quarterfinals during the months of November, December and January. It then continues with semi-final, a Swiss Final and ends with an international Final.

Last year, FSJM proudly welcomed the international final at EPFL in Lausanne for the first time. For two days, 350 finalists came from all around the world to participate. There was a parallel mathematical competition as well for the people who had not been selected but still wanted to enjoy the thrill of the competition. The campus of EPFL was flooded with mathematical lovers. FSJM had organized many activities for the public allowing them to discover science through conferences, chemistry shows, a hex tournament (a board game where participants have to align a row of pieces) games and robotic workshops. EPFL Rocket Team and Swiss Plasma Center were also present on campus. It was a success!

The Swiss team at the 36th final at EPFL

Finalists from all over the world at EPFL

COVID took a toll on the championship unfortunately for a period of time. FSJM, along with the other federations, had to rethink a new way of promoting mathematics and allow mathematics enthusiasts to continue playing. As the 34th Swiss final had to be cancelled, along with the international championship, FSJM came up with a new idea: the Online World Math Contest. Open to everyone, everywhere, the contest offers a competition that mixed logic and common sense. Divided in 7 categories, the online world math contest bears the same principles of the championship: solve mathematical problems in a limited period of time and with no calculator.

The launch of the 37th championship took place on the 13th of November at the Swiss Museum of Games in La-Tour-de-Peilz in Switzerland. Members of FSJM were on site to introduce the mathematical championship and allow individual contestants to try out the new mathematics problems and riddles in order to be qualified for the semifinals.

There were also mathematical games and workshops conducted by two mathematicians which attracted many families on a sunny Sunday by the Lake of Geneva. The workshops were fully booked.

Among the visitors, there were adults who had previously participated in the championship and came with their children for them to play. It shows how the enthusiasm for mathematical games has become cross-generational!

Many Swiss schools are currently offering their students the opportunity to take the quarter final. Individual contestants have until January 15th to submit their answers and be selected for the semifinals that will take place on March 18th in various centers throughout Switzerland. The Swiss final will be on the 13th of May, and the International Final will take place this year in Wroclaw, Poland on the 25th and 26th of August.

So, on your maths, set, go!

The Categories:

Children: CE: year 5 students (5 problems- max 60 minutes)
            CM: year 6-7 students (8 problems- max 90 minutes)
             C1: year 8-9 students (11 problems- max 120 minutes)
             C2: year 10-11 (14 problems- max 180 minutes)

Teens and Scholars : L1: post-mandatory school students (16 problems- max 180 minutes)
   L2: university students (18 problems- max 180 minutes)

Adults: GP: adults, general public (16 problems- max 180 minutes)
   HC: adults, top-level competition (18 problems, max 180 minutes)

Site: fsjm.ch

$$\frac{1}{3} = \left(\frac{1}{4}\right) + \left(\frac{1}{4}\right)^2 + \left(\frac{1}{4}\right)^3 + \left(\frac{1}{4}\right)^4 + \cdots$$
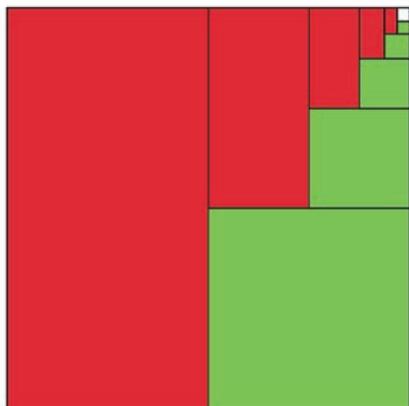
$$1 + 3 + \cdots + (2n - 1) = n^2$$
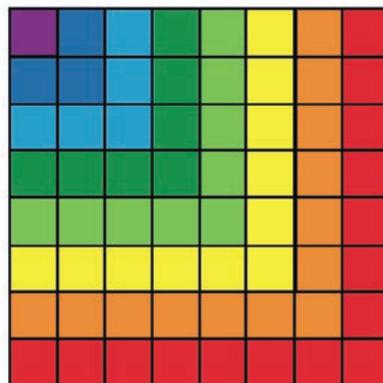
$$\arctan\frac{1}{2} + \arctan\frac{1}{3} = \arctan 1$$

$$1^3 + 2^3 + 3^3 + \cdots + n^3 = \frac{1}{4}\left(n \times (n + 1)\right)^2$$

Source:
https://static.idm314.org/resources/activities/idm-proofs-without-words-en.pdf

INTERNATIONAL DAY OF MATHEMATICS MARCH 14
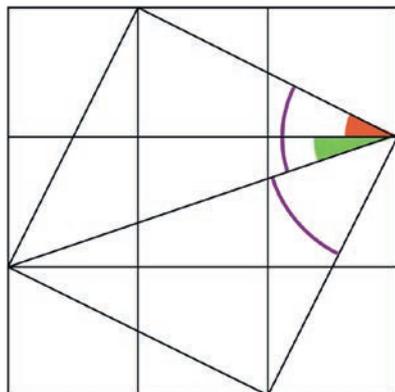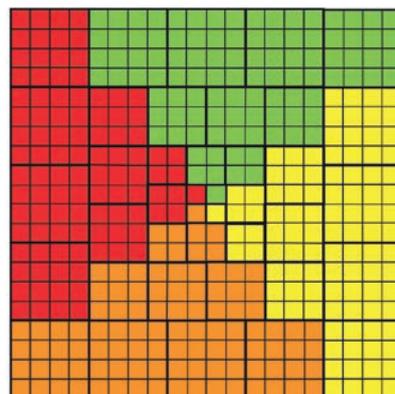
KANGAROO-KANGAROO-KANGAROO

Aleksa Malcheski

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The kangaroo, when viewed as a competition, and you are not a direct participant in it, does not seem to be anything in particular. Just a game that, as described, can be considered as a math game. But once you taste the kangaroo competition, in any form (organizer, participant-competitor, mentor...), everything changes. It is just that, for true mathematicians, you stay in it until the end. That is how it is. The kangaroo in its shape is created by a series of mathematicians from all over the world, and those mathematicians who are of the highest quality in their part of mathematics - mathematical logic. That thread of creation of this magnificent contest is the main backbone around which all things revolve. Of course, they should see the brilliant ideas that are the backbone of the kangaroo problems, even for those with the least points, so that it becomes clear to you that it is a brilliant competition - not a math game. Those ideas seep into every problem that is put on paper in our shortlists (something that is not protected by us in any way - especially the shortlists). We promoted the idea of a kangaroo in our country at the very beginning of its formation. The competition with a series of problems continues to this day. In recent times, the competition has experienced strong structural changes and is taking its place in the mathematical world in full glory. We hope that such structural changes that it experiences will withstand the test of time and it will be permanently engraved in the memories of our students.

The management of the Kangaroo must definitely not be forgotten here. First of all, to the President of Kangaroo, Meike Akveld, as well as to the Board of Kangaroo. With their above all perfect attitude towards all the participants of this competition, they give a special touch to the competition. Special emphasis should be placed on the attitude of President Meike, who with her impeccable attitude, energy, strength, which, together with the IMPECCABLE BOARD, strongly contributed to its development throughout the world. With that, she definitely stood on the side of peace in the world and strong social development in a number of countries in the world. What the previous president started, simply unconsciously, the new president has developed in a conscious form to unprecedented limits. Today we have 99 countries, like never before, that are involved in the organization of this magnificent event - KANGAROO. Hopefully this will continue and eventually world peace will win along with the Kangaroo competition.

Kangaroo in Ohrid. We look forward to hosting the 31 KANGAROO ASSEMBLY MEETING. There is no higher idea than that for us. An idea that we from North Macedonia started to develop a little while ago. That idea was a topic of conversation in mathematical circles dealing with the Kangaroo competition back in 2016. But those were times in which there were also a series of other problems that had to be urgently solved. So, we started working with that idea after two years, which is in 2018 when a number of other problems were already solved in the competitive mathematics section in North Macedonia. We have submitted an application to be host. It was finally approved that the assembly of Kangaroo will meet in 2025 in North Macedonia. Armenia was chosen for the year 2023. But due to the unstable situation in that country, they came up with the idea of replacing Armenia with North Macedonia in 2023. So, we became candidate organizers for the year 2023 of this magnificent gathering - KANGAROO ASSEMBLY 2023. Then all forms of organization of this event were approached (the assembly can start working in 45 days - if necessary). All things are brought to the very end, even though it is now 2022. The city of Ohrid is a beautiful city in our country, as well as a number of other cities. The city of Ohrid with its beautiful Ohrid Lake is in the deep memory of many countries and people in the world. First, it is one of the oldest lakes on the European continent. When talking about the city of Ohrid, of course one must mention the Ohrid Archdiocese, which is still the backbone of Macedonian life. Second, a few facts about this Macedonian city must not be forgotten. The first Slovenian university - the University of Ohrid - was established in that city. A place where a large number of residents from our Macedonia were educated and spread literacy throughout the Slavic world. Only in the official documents it is said that more than 3000 graduate students went to all the Slavic countries and were engaged in the education of the Slavs. Local alphabets and local letters were then formed in the same, which are still used today. Another fact that is certainly indisputable about Ohrid is the OHRID AMPHITETATAR. This confirmed that the city of Ohrid - with the ancient name LIHNIDOS existed in antiquity. If a place has an AMPHITHEATER that holds over 3000 listeners, one can only guess what it looked like in antiquity. But the fact is that if that city had an AMPHITHEATER, it must have been a beautiful CITY. Let's leave it to the ARCHAEOLOGISTS AND HISTORIANS to investigate. That are the two places that are planned to be part of the visits of the KANGAROO ASSEMBLY. In essence, these are two excursions, from which we will have to choose one and carry it out. The city of Ohrid is a place of Slavic culture. Above all, with its 365 churches, it holds the distinction of being the Second Jerusalem. If you visit, you will see that it is so. We invite you to come in the beautiful North Macedonia from 11.10.2023 till 15.10.2023 and participate in the work of the Kangaroo General Assembly.

In the end, let time tell everything. Let's meet in Ohrid and experience what is said in this article. No one will regret it.

SCRIPTA MANENT

M i c h a e l   L a m b r o u

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  The purpose of this column is to discuss, periodically, proverbial phrases from philosophy, literature or history that are relevant to Mathematics. In each case we explore the origin, meaning, and use of maxims which mathematicians and intellectuals often like to refer to.

ΑΓΕΩΜΕΤΡΗΤΟΣ ΜΗΔΕΙΣ ΕΙΣΙΤΩ
"Let no one ignorant of Geometry enter"

This phrase, written above in the original Greek with a translation following, is an alleged inscription at the entrance of Plato's Academy, one of the outstanding Schools of Philosophy in ancient Athens of the time of the Acropolis, in the 4th century BC.

The meaning of the phrase is best illustrated by an anecdote concerning a successor in the leadership of the Academy after Plato's (428-348 BC) death, the scholar and philosopher Xenocrates (396-315 BC). According to Diogenes Laertius in his valuable book of biographies, the Philosopher's Lives, Chapter IV, a young man once requested to be enrolled in the Academy. Xenocrates asked him if he knew Geometry but the young man replied that he did not. This was sufficient for the Master of the Academy to reject him exclaiming "go away, you do not have the prerequisite knowledge to learn Philosophy".

So what is the connection between Mathematics and

Detail from Rafael's painting at the Vatican, The School of Athens, depicting Plato and his most famous student, the polymath Aristotle (384-322)

Philosophy that Plato's Academy demanded knowledge of the former as a prerequisite for the latter? For the answer, we have to start 200 years earlier, at the School of Pythagoras (6th century BC), whose influence on Plato is strong. The word "mathematics" was introduced by Pythagoras and derives from the verb "μανθάνω" (manthano) which means "to learn", especially via investigation and scrutiny. From it stems the noun "μάθημα" (mathema), which means "that which is to be learnt". From then on it is used both by the Pythagoreans and Plato, as an equivalent to knowledge, science, discipline, course, instruction, study or learning. Moreover, a passage by the Pythagorean philosopher and mathematician Archytas of Tarantum (~435-360 BC), quoted by Heron of Alexandria (~10-70 AD) in his Definitions, states that Mathematics was the course (mathima), that is, the main subject taught at the School of Pythagoras, whence its name.

Plato of Athenian

Plato kept this tradition as is clear from his Academy's remarkable contribution to knowledge, and is also extensively discussed in his deep philosophical Dialogues. For example in his Republic (VII, 526c8-527c11) he states that the sciences, especially Geometry, are central for the formation of philosophers. He also clarifies that Geometry and the other mathematical sciences, are not an end in themselves, but a prerequisite meant to test and develop the power of abstraction in the student. In other words, it helps the student develop the ability to go beyond the level of sensible experience of the material world, and reach abstraction.

Let us now come to the history of the phrase per se, and how it was delivered to us from antiquity. The earliest reference is more than 500 years after Plato's death, in Pseudo-Galen's On the Kinds of Philosophy. This is a text that bears the name of the great physician and philosopher Galen (130-200 AD), father of comparative anatomy, and experimental physiology, but modern research attributes it to a later person of the 2nd century AD or later. In the said work the author mentions that philosophy is divided into theoretical and practical, but the theoretical philosophy is subdivided by Plato in a different way than by Aristotle. In this discussion, pseudo-Galen finds the opportunity to talk about the famous inscription, but also to explain the reason for its existence. He says, deviating from the reasons I stated above, that in Plato "Mathematics is not intended to be a part of Philosophy, but a training, like Grammar and Rhetoric. Whence at the entrance of the auditorium he wrote αγεωμέτρητος μηδείς εισίτω (Let no one ignorant of Geometry enter). Plato wrote this because he studied Theology, and Mathematics contributes to the knowledge of Theology".

An indirect reference to the inscription, without stating the exact wording but assuming that the reader knows it anyway, is made by the Emperor of the Eastern Roman Empire, Julian (331-363 AD). Julian, the so-called Apostate (transgressor) because he rejected the new at that time religion of Christianity, was an admirer and had a deep knowledge of ancient Greek Philosophy. His philosophical works were all written in Greek rather than in his own language, Latin. In an oration entitled Against the Cynic Heraclius delivered in 361 AD, he states "if you had read the phrase that is written at the entrance of his (Heraclius') School, as well as in the School of Plato, you would have known that those who wished to become members of the Peripatetic Philosophers (i.e. the followers of Aristotle) had to be devoted to gods, should be initiated into all the mysteries, take part in the holiest rituals, and be versed in all the sciences".

Several other ancient authors cite the inscription, giving various justifications for its existence. In my opinion, the right interpretation is the one I give at the beginning of the article. The others are later and are based on the philosophical trends of their own time, such as Neopythagorianism, Neoplatonism and Theology, in great contrast to the spirit of classical times. One such was by an almost contemporary of Julian, the sophist and philosopher Sopater (4th century AD). In one of his works he discusses the prominent Greek orator Aelius Aristides (117-181 AD). There he says that Aelius Aristides quotes word for word
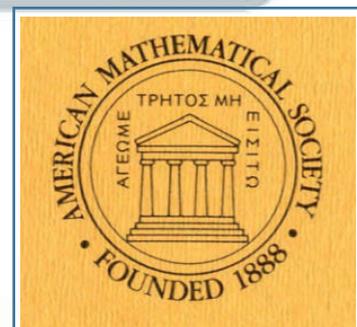
Logo of American Mathematical Society with Plato's inscription

the inscription, which he repeats for us. He then adds that it was common in antiquity to have at the entrances of holy places inscriptions stating, in one form or another, that "the unjust should not enter". It is in this tradition, he says, that Plato wrote the inscription at the entrance of his Academy "because Geometry demands equality and justice". Indeed, in several passages in Plato's dialogues there are expressions that relate Geometry to equality. One such is in Gorgias (passage 508a) where the main character Socrates infers to "geometric equality" explaining that this is the reason why sages call the universe "cosmos", which in Greek means "order of things". (By the way, the word "cosmetic" derives from it).

Let me add that also in Byzantium it was common to write at the entrances of holy places the admonition "the unjust should not enter". Many such admonitions have survived up to our times, as for example there is one at the entrance of Hagia Sophia in Constantinople, modern-day Istanbul, built 1500 years ago.

Another piece of information about Plato's inscription is by the Byzantine polyhistor Ioannis Tzetzis (1110-1180), which is in the same spirit but records a longer version. Namely, in the cornucopia of information, his Chiliades (Book VIII, 974-977), he writes in verse "at his entrance Plato wrote Μηδείς αγεωμέτρητος εισίτω μου την στέγην (let no one ignorant of Geometry should come under my roof). That is, no unjust person should attend here, because Geometry is equality and justice".

There are several other references to the inscription, but for reasons of economy of space, I will not elaborate. They are due to Joannes Philoponus in his Commentary on Aristotle's De Anima, Olympiodorus in his Prolegomena, Elias in his Commentary to Aristotle's Categories and David in his Prolegomena to Philosophy.

I wish to close with an Arabic source: After flourishing for about 1000 years, Greek Mathematics decayed. It passed around the 9th century to the Arab-speaking world which cultivated and preserved it. Although several of the original Greek Mathematical texts have survived until today, most are lost. Luckily, we do have some that survived in an Arabic translation. We also have some pieces of information about Greek Mathematics that survive in Arabic literature, and the story of Plato's inscription is no exception. However, this particular one is, no doubt, distorted and the central character is Euclid, an offspring of Plato's Academy, rather than Plato himself. For the record, it is stated by al-Qifti (?-1248) in his work Tarikh al-Hukama, after a brief biography (certainly incorrect) of Euclid, that "for this reason the Greek philosophers used to post at the entrances of their schools the well-known inscription No one should enter our school unless he has learned (Euclid's) Elements".

Michael Lambrou

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ALLA DITTA RAZA CHOUDURY

1 9 5 1 - 2 0 2 3

On the morning of 7th of January 2023, Professor Alla Ditta Raza Choudary took his last breath at the age of seventy one. He died of a very sudden heart attack, without suffering, after swimming on a beautiful beach in Mexico.

Alla Ditta Raza Choudary was born in Lahore in 1951 within a humble farming family that owned land and a lot of animals. As a child Raza was responsible for grazing buffaloes, an experience which he frequently cited as preparing him for greater challenges throughout life. In school he excelled in mathematics, hence after completing his bachelors and master's degree he won a scholarship to pursue a doctorate in mathematics at the University of Bucharest in Romania. At the end of 1970s he went to Mexico, where he worked for 6 years and became a founder of a School of Mathematics at the University of Guadalajara, as well as of Research Center at Universidad Vera Cruzana. After that he served as a Professor at Mathematics Department of Central Washington University USA for 22 years. At this university he received the award of Most Inspirational Educator in 2002 and the award of Distinguished Professor in Research in 2003. He is an author of four books published by well-known publishers, including Springer, and several research papers. He was dearly loved and respected by his students and colleagues, and during this period he was engaged in research in the area of mathematics known as algebraic geometry that is notorious for its abstraction and steep learning curve.

In 2003, he took charge of Abdus Salam School of Mathematical Sciences (ASSMS) as its first Director General, and during his 11 years of service, 130 students received their PhD degree in Mathematics. This has already more than doubled the existing tally of university math faculty at the doctoral level in Pakistan. ASSMS became the premium seat of mathematics learning and research in Pakistan. It was the only School in Pakistan that was also recognized as an Emerging Regional Centre of Excellence (ERCE) by the European Mathematical Society (EMS). Dr. Choudary served as the main organizer of 10 international conferences in different parts of the world. He was also the main organizer of several international research schools including several CIMPA Schools in Pakistan. He Initiated the training and selection program of the Pakistani team to participate in the International Mathematics Olympiad (IMO). He led the Pakistani team to IMO, and during his leadership Pakistani team's performance reached up to the level of winning silver medal.

He Initiated the training and selection program of the Pakistani team to participate in the International Mathematics Olympiad (IMO). He led the Pakistani team to IMO, and during his leadership Pakistani team's performance reached up to the level of winning silver medal. Professor Choudary had a very particular vision for modernizing the mathematical culture in Pakistan. He quickly realized that to achieve it, he had to somehow reach the students early at the grass-root levels. Thus, the International Kangaroo Mathematics Contest (IKMC) was introduced to Pakistani school children in 2005 to promote mathematical reasoning. The IKMC became an instant hit with school children and their families, and tens of thousands participated annually.

In his personal life Raza was a deeply spiritual man and cognizant of his duties to his Lord. His righteousness and honesty shone through in his practices and dealings both private and professional.

Professor Choudary is survived by his son Omar, his daughter Shahida and his wife Valentina who will all dearly miss him, as well as the hundreds of friends, colleagues and students who have been touched by his significant life and career. He may no longer be with us, but the legacy of his life and work will continue to be felt for a long time in Pakistan.

Remembering Raza
-from family and friends-
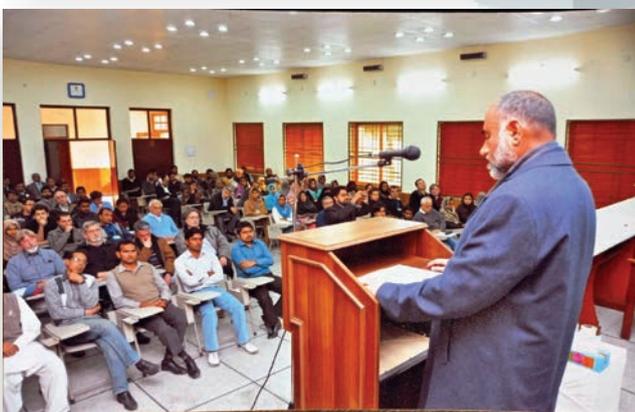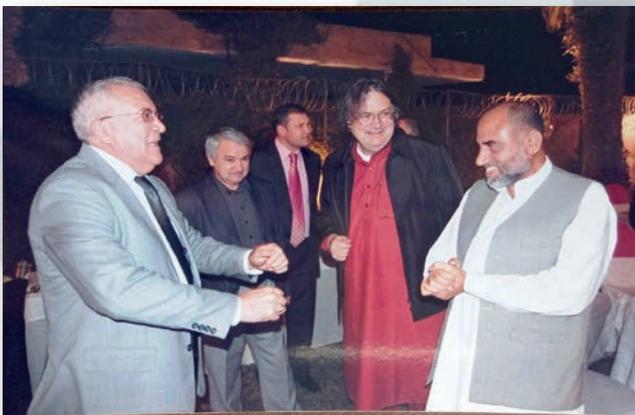
JOZSEF PELIKAN

1947-2023

Dr József Pelikán, retired assistant professor at the Department of Algebra and Number Theory, Institute of Mathematics, Eötvös Lóránd University, has passed away in the 76th year of his life. He was born on October 26, 1947 in Budapest. He graduated from the first, legendary mathematics class of the Fazekas High School in Budapest. József Pelikán's mathematical talent showed early, he was a student of outstanding ability. He took part in the International Mathematical Olympiad 4 times, winning first prize in Moscow in 1964, Berlin in 1965 and Sofia in 1966. He was fourteenth on the IMO's all-time ranking list.

In 1971, he graduated with honours from the mathematics department at ELTE, and in 1973 he received his doctorate with a gold ring award. From 1971 until his retirement, he taught at the Algebra and Number Theory Department of Eötvös Loránd University.

He didn't part from high school mathematics either, he especially enjoyed dealing with competitions and talented students. Since 1988 (with the exception of one year), he has always been the leader of the Hungarian IMO team. He was a member of the governing body of the Mathematical Student Olympiad, and also performed the duties of president for 8 years. It was here that he became acquainted with the Kangourou Sans Frontieres competition run by André Deledicq. In 1995, he organized the first 'pilot' competition in Hungary, and from the following year he helped the Foundation for Mathematical Talents organize the competition. He participated in the assignment compilation conferences. He was a linguistic genius, he spoke English, French, German and Russian.

His career was surrounded by several awards and recognitions: in 2009, he received the Bolyai award together with Dr Katalin Vesztergombi. In 2014, the World Federation of Mathematical Competitions recognized his work with the Paul Erdős Award, which can be awarded to mathematicians who have played a significant role in national and international mathematics competitions and thereby contributed to raising the standard of mathematics education.

His hobby was bridge, and he achieved excellent results as a competitor for twenty years.
We say goodbye to József Pelikán with his guiding creed: "You have to work, work a lot! The results will come."

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Remembering József
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ARE YOU READY?

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I'm not writing "Are you ready?" like a presenter who wants to get his audience excited. Another Kangaroo Math day is approaching and I find myself asking myself this question all the time. Are we ready for students and teachers to experience the excitement of a new kangaroo?

How to be ready? Yes, we have been organizing the competition for 30 years, but every year we experience the same excitement as an association. No new year is the same as the old ones. Both our increasingly widespread competition and technological developments make it necessary for us to be renewed every year.

Still, we have a to-do list that remains constant:

- Preparation and selection of questions
- Translation of questions if necessary
- Revision of translations and creation of booklets
- Receiving participant lists from schools
- Delivering the prepared booklets to the students
- Evaluation of the results

This list is a general template, but thanks to technological conveniences that have become more and more available in recent years, technological solutions for both registration and announcement of results have also become available.
   There are also topics such as video solutions to questions that were not on our agenda in the past, but which we now need to think about:
- Providing online preparation questions before the competition,
- To provide participants with a PDF Test Entry Document before the competition,
- Preparing video solutions of the questions,
- Communicate exam results as a digital Report Card,
- Organizing Kangaroo Workshops for teachers who support the competition...

The list goes on and on. And new ones are added to this list every year. Each title on the list actually points to an area that requires a specialization on its own. Especially if the number of participants is high, it is necessary to make plans well in advance and work as a harmonious team in order to have a smooth period in so many topics.

So yes, we are ready and renewed to start this great event again this year for the 31st time in the universal world of Kangaroo.

Important dates in 2023

Kangaroo day	Thursday, March 16, 2023

	Download proposed problems	20. 9. 2022 — 15. 4. 2023	Proposed problems are available for download.
	Download selected problems	12. 10. 2022 — 15. 4. 2023	Problems selected at the Annual Meeting are available for download.
	Download finalized problems	31. 10. 2022 — 15. 4. 2023	Final versions of problems (including latex files and all the figures) are available for download.
	AKSF report	1. 5. 2023 — TBA	Report refers to the Kangaroo contest 2023.
	Registration	1. 6. 2023 — TBA	Registration for the Annual Meeting
	Submit problems	1. 6. 2023 — TBA	Submission of problems, graphics, correction of problem statements and/or classification.
	Annual Meeting	11. 10. 2023 — 15. 10. 2023	More information about the 2023 meeting in Ohrid, North Macedonia here: ksf2023.mk