Issue 4 - July 2022

Association Kangourou Sans Frontières

Joanna Matthiesen

Hello and welcome to our fourth
Kangourou sans Frontières Newsletter

Luis F. Câcares-Duque

Presidental Election of the AKSF

Martin Winkel

Pilot Project of Math Kangaroo questions,
STUDENT version, offered to the
University of Nijmegen
students in the Netherlands

Math Site
Mathigon

Angelo Lissoni

XXX Annual Meeting of the AKSF,
October 5 - 9, 2022

Claude Deschamps
21/12/1941 – 11/04/2022

Mark Ivanovich Bashmakov
10/02/1937 - 31/03/2022

Leonardo Lois
13/06/1960 – 02/06/2022

Carles Romero
20/09/1948 - 17/12/2021

Hello and welcome to our fourth Kangourou sans Frontières Newsletter.

I am pleased to write this short introduction to our fourth edition of the AKSF newsletter. By now I hope all have completed the Kangaroo Season with the joy that comes from the Math Kangaroo Award ceremonies and recognizing the many winners and educators that put their hearts and minds into making this event a success. More students participated in person this year (vs. 2020/2021) and the prognosis of going back to a predominantly in-person format looks promising.

As always, I want to thank the members who found time to write an article or share an idea on something interesting as it relates to Mathematics and Math Kangaroo happenings. We also have some sad news about passing some of our distinguished members. Please read the articles below as all are important.

Summer break is coming, and we all deserve a break. At the same time, I want to remind all AKSF members that during these summer months we should not forget the following obligations:

Joanna Matthiesen
joanna@mathkangaroo.org

1. Register for the 2022 AKSF Annual Meeting (June 1 – July 31)
2. Submit the Annual Report (May 1 – September 22)
3. Propose at least 6 Math Kangaroo questions for 2023 (June 1 –August 5)

In order to register for the meeting, submit your reports, or propose questions use our internal website here: https://support.aksf.org/.

I look forward to receiving your feedback regarding this newsletter and hearing from new members that have not written before to propose a topic for the next AKSF newsletter.

Wishing you a wonderful summer,
Joanna

Presidental Election of the AKSF

Luis F. Cáceres-Duque

luis.caceres1@upr.edu

A new presidential election is approaching and the members must be aware of the importance that this event has for the future of the Association. Meike is finishing her first three years term as president of the AKSF, she was elected in 2019 in Chicago. I have been in the AKSF since 2005 and on the Board as Secretary and then Vice President for 8 consecutive years and I have been fortunate to see the growth of the Association up close, under the leadership of Andre Deledicq, Gregor Dolinar and Meike Akveld.

The association has been fortunate to have high caliber presidents. The first, Andre, founder and in charge of giving the association the foundations that have made it very stable and of great scope and international recognition. Then, Gregor, who was mainly in charge of the growth of the Association and the reorganization that an association, involving over 80 members, needs. Next came our current president Meike, who, in addition to the challenge of continuing the organization of the processes and the efforts to continue the growth of the association, she has had the great task of directing the AKSF in times of the COVID 19 pandemic with all the challenges that this has entailed. For the AKSF it has been fortunate to have Meike in a time of many changes and challenges. These three leaders have contributed to the Association in many ways, the most important helping the Association reach the academic and social position in which it finds itself. It is essential for the Association to have a true leader as presi-dent. In all these years I have realized that one of the main skills that a president must have is to have the ability to get his/her close work team, in our case the members of the Board, to work hard and do so articulately. The president must be a person with excellent communi-cation skills, willing to respond to a child from any country who writes to know how to participate in the

competition and even to speak with high authorities of a country that wants to become a member. On the other hand, the president must be a generous person, willing to donate time to fulfill the different tasks that the position requires. And perhaps the main skill a president must possess is to be a conciliatory, sensitive, inclusive person, willing to accept and get the best out of all the different points of view; after all, the Association has members from almost a hundred countries, with a diversity of languages, cultures, religions, political situations, etc.

In article 8 of the By-laws of the Association, all details about the election and all responsibilities and rights of the president are detailed. The President of the Association is elected by the General Assembly. Any full active member can run to be President provided that such candidacy is supported by at least three other full active members. The President is elected for a 3-year term, and may immediately be re-elected. Each year runs from the end of an Annual Meeting to the end of the following one. No President may hold office for more than three consecutive terms. The President alone represents the Association in all civil formalities and is vested with all powers to this effect.

The main aspects that the president works with, with the direct support of the members of the Board, include membership issues, finances and the problem selection process. On the other hand, the president manages aspects related to the external page and the internal platform, elections, annual meetings and the search for future venues. The president works directly with the legal advisors and does a lot of public relations work at various levels.
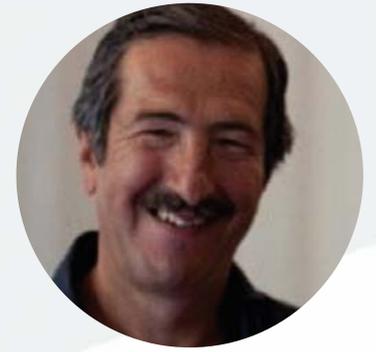
I trust that we will have candidates who want to assume this responsibility of continuing to temper the association to the new times, modernizing processes, attracting countries and regions that are not yet in the association, maintaining a professional atmosphere of camaraderie and high standards, and above all supporting the members so that together we can achieve the great objective of the association, which is the popularization of mathematics.

Luis F. Cáceres-Duque

XXX Annual Meeting of the AKSF, October 5 - 9, 2022

A n g e l o L i s s o n i

lissoni@kangourou.it

Let's go to Italy, let's go to Cervia beside the Adriatic Sea!!

Although an article was already present in the III Newsletter regarding the XXX AKSF Conference, here we add and reiterate some information.

How to get here? By plane Bologna airport is recommended, otherwise by train Cervia station.

When to arrive and when to leave? Your arrival is scheduled for 5 October 2022 while your departure will be on 9 October.

When and where can I register? Registration on the AKSF official website is scheduled from 1 June to 31 July 2022. The balance of the members' fees is also expected by 31 July.

Will the conference be only in person, or can it also be online? We hope that everyone can be present, as the pandemic should be tamed; however, we also provide for the possibility of online participation for those unable to attend.

Can we get a hint of the program? Sure:

- Wednesday the 5th is the day of arrivals (scheduled direct buses from Bologna airport to Cervia, managed by Kangourou Italia).

- Thursday, after the opening ceremony at the eighteenth-century Cervia

Theater, the work of the commissions will begin and will continue even after lunch. The session for special events will be held on Thursday evening at the Theater.

- Friday you still work in the morning and afternoon commissions; gifts will be exchanged during lunch.

- The General Assembly will be held on Saturday morning, and, after lunch, we will leave for the visit of Ravenna. In the evening there will be a gala dinner at the end of the works, with the awards ceremony.

- Everyone is free to leave on Sunday.

What are the costs and where to pay?

	DOUBLE Room	SINGLE Room
First & second participant	300 €	450 €
Third & further participants	600 €	750 €
Accompanying persons	600 €	Not Available

Can we have assurances about coming to Italy? At the end of 2021, the well-known newspaper "The Economist" chose Italy as the Country of the Year 2021.

Can we all stay in the hotel? We have worked to have more hotels available, all within a maximum distance of 200 meters and overlooking the sea or not far from it. We are therefore ready to host many participants.

Do the hotels expect some participants to extend their stay or anticipate their arrival? Certainly. They even defined a special e-mail (kangourou@emmehotels.com) to acknowledge just these needs.

The organization plans to visit Ravenna, which other cities are within a reasonable radius of Kilometres from Cervia? Venice, Verona, Bologna, San Marino, the Po delta, the Comacchio valleys, Cesenatico, Rimini, Cesena, Ferrara, Modena, Pesaro ...

Do the hotels have agreements with the beach? All hotels have an agreement with the nearby beaches and provide sunbeds and umbrellas.

What is the temperature of the sea water? At the time of writing (11 May 2022) the water temperature is 16.9 C° (63 F°).

Bring your swimwear!!

Pilot Project of Math Kangaroo questions, STUDENT version, offered to the University of Nijmegen students in the Netherlands

This year, for the first time, we offered the Kangaroo student version to math students at the University of Nijmegen in the Netherlands. 18 students (from the first to the third year at the university) participated in the version we call wizEXPERT.

The organization was in the hands of the DESDA study association. After the contest they were asked to complete a survey. The highest score was 142 points (out of 150) and the lowest 90. The average was 121. That's pretty high! The last two questions were the hardest ones, which makes sense. The winner and the runner up received a nice price from us (a game).

The results of the survey were very positive: everyone agreed that it was fun to participate. Everyone thought the questions were clear and well arranged (the most difficult ones at the end). The students said that the problems were very nice, challenging and creative. The set of problems was a good mix of different subjects like geometry,

M a r t i n   W i n k e l

w4kangoeroe@gmail.com

numbers, puzzles, and logic. The time assigned for solving the mathematical problems was not sufficient for some students.

Most of the students had a nostalgic feeling of being at the secondary school again. Everyone expressed excitement to participate again next year! In the year to come we want to give all university students the opportunity to participate and make it a national contest. Unfortunately, I can't add any photos from this event because of privacy legislation.

Leonardo Lois
13/06/1960 – 02/06/2022

Leo left us, surprised us without warning, without giving us the possibility of a last hug, without allowing us to tell him how important he was for all of us who had the fortune of knowing him. He left us immersed in an enormous sadness knowing that we will no longer be able to count on his constant good humor and kind words. We will not be able to see his always well-chosen words that sought to settle any difference for the good of all parties. He was a person that valued a strong embrace whenever he saw that this was needed at a particular moment.

At the same time, Leo left us with something else. He left us with the memories of his teachings of mathematics that was his greatest passion. He was also a great friend who could be trusted, supportive, always ready to offer a possibility of growth to those around him. He will be remembered in particular through his care of the youngest who looked for the opportunity of an intellectual growth. He lived a beautiful life without holding anything back. He enjoyed every moment spending time with his family, his loved ones, among whom I know we are all those who read these lines. He left us physically, but he will continue to guide the path of those of us who were lucky enough to cross our lives with him.

Article by:
N e l s o n   C h o c c a
lacompartida@gmail.com

Claude Deschamps
21/12/1941 – 11/04/2022

Claude Deschamps, a great friend of Math Kangaroo, passed away on March 11, 2022. Claude Deschamps was first and foremost a mathematics teacher in preparatory classes. He taught generations of students and prepared them for the competitive exams of the most prestigious schools. He taught at the Lycée Louis-le-Grand for more than thirty years. Being a student of Claude Deschamps was a great honor. Beyond the pedagogical and scientific gifts, he also had a gift of delivering fascination, theater, and amusement during his lectures. In his forty-year career, he has trained many students who have gone on to have the most remarkable professional careers like mathematicians, scientists, professors, industrialists, and ministers. Many students remember Claude long after they finish studies as the time spent with Claude was very special. Claude Deschamps above all he will be remembered as a tireless promoter of mathematics, within the framework of the Olympiads (international or French) and the Mathematical Kangaroo. Claude Deschamps was a leader of the French delegation to the International Olympiads, from 1978 to 2013. Several times he was unanimously elected a president of the International Olympiad Advisory Committee. Claude organized the Olympiad in Paris in 1983. In 1990 he participated in the Olympiad in Beijing, during which the French results were remarkable. In 2009 he organized the year of the fiftieth anniversary in Bremen together with former candidates who became great mathematicians (like Jean-Christophe Yoccoz from France).

In 1998 there was another remarkable Olympiad: Canberra, organized by Peter O'Halloran, also creator of the Australian mathematics competitions. Claude Deschamps was impressed by the size of these competitions. In 1992, he joined his friend André Deledicq and Jean-Pierre Boudine who were inspired to create a mathematics competition in France in 1991. In tribute to Peter O'Halloran and Australia, this competition was called Concours Kangourou (Kangaroo Competition), and today brings together more than six million students around the world every year. For about twenty years, Claude actively participated in the organization and development of this contest and the association Kangourou Sans Frontières in particular by inviting his friends from the International Mathematical Olympiad to participate.

It is impossible to summarize his life and his achievements in a short writing since there were countless remarkable events and happenings in his rich and busy life.

The death of Claude Deschamps is an irreplaceable loss. We will always remember and think of him whenever we do beautiful mathematics, for the Mathematical Kangaroo Contest or the Olympiad.

Article by:

J o h a n   Y e b b o u
johan.yebbou@igesr.gouv.fr
Inspector General of Mathematics
(Former Dean, French Ministry of Education
representative in the field of mathematics teaching)

Carles Romero
20/09/1948 - 17/12/2021

A few months ago, Carles Romero left us, a friend, a colleague and always a teacher for those of us who shared time with him. Those of us who knew Carles through his various activities in the world of mathematics asked him to join the Kangaroo team in Catalonia and he has been, for many years, one of the souls of the work of the commission, and he has contributed with creative moments of discussion, of reflec-tion and also of leisure and calm (when we made trips) which allowed us to enjoy its way of being: serious, ironic, reflective, fun, equanimous. We spent a lot of time working on selecting the problems to send to the Kangourou meetings, drafting them, and participating in the

fnal selection at the AKSF annual meeting. Then came the time when Carles collected all the com-ments made by the members of the Catalan commission and got the final wording and graphics for the test in Catalonia. He thought that it could be very good for Catalonia to organize one of the annual meetings, he collab-orated decisively in the elabora-tion and presentation of the pro-posal and this is how the meet-ing was held in Barcelona in 2006. He was in charge of all the work of editing and making the book with the proposed prob-lems, as he had been doing for some time and has done until the end, with the Catalan editions. We owe a lot to Carles, both the students who have par-ticipated in the Kangaroo com-petition and the teachers who have participated in it for more than 20 years. It is very exciting to say that a colleague of Carles's, at the same institute, and a former student of that institute

are taking part in the annual meetings of Le Kangourou Sans Frontières. We complete this brief remind with a memory of each of them.

Article by: Marta Berini
Antoni Gomà

I met Carles Romero when he arrived at the La Garriga high school in the early 1980s, where I was already working. Our paths, especially pedagogical and mathematical, would no longer be separated until his death last December.

It was a revolution. How many things I learned along side him. What a vision, especially geometric, he had of mathematics. I saw things I couldn't even imagine.

In 1996 he knew, through his colleagues in the Mathematical Olympic steam, about a mathematics competition, which was just beginning in Catalonia that year, which was called Kangaroo. We encouraged our students. And every year we participated.

In 2002, the Catalan kangaroo commission asked us to accompany the Catalan winners to a campus organized by the French Le Kangourou in Auch. There I had the honour of meeting Professor Bellot and Jean Christophe Dedeliq. We went there and were then appointed as representatives at the Rimini Meeting. But the nomination was not for a year and so we continued. Me until now, and he until 2009. He could no longer come to Minsk because of a serious illness from which he would recover.

He studied and saw kangaroo problems in a special way. He often improved them. But he also had, albeit discreetly, a vision, let's say a politic alone, of the association, and its contributions within the Catalan group were very important.

Always discreet, attentive to everything and a tireless and efficient worker. Much of the work he has done for the AKSF and for the Catalan kangaroo is known only to those of us who have been fortunate enough to work alongside him.

Article by : Lluís Almor

I have no doubt that the good teachers of mathematics I had at the high school in La Garriga, and especially Carles Romero, aroused my vocation for mathematics, and especially for its teaching. And I'm not the only one of his students who discovered this exciting world of mathematics in a way we hadn't understood before. After that time as a student, I was lucky enough to keep in touch with him, as a friend and as a member of the Kangaroo Commission.

Carles was a math teacher in capital letters. He was not an extroverted teacher, he did not earn his students for being very friendly or for being funny. I and many others were captivated by his love of his profession, his purely mathematical way of teaching. He put math in front of our eyes without blurring it, as many teachers do because they feel guilty about having to teach math because they take it for granted that students may not like it. There was no need to disguise them with Carles, he gave the opportunity to anyone who wanted to take advantage of it to see the beauty of mathematics, to discover the emotion of solving a problem, to enjoy those moments when the bell rings in your head. We will never be thankful enough for those opportunities.

Article by :Marc Guinjoan
        mguinjoanc@uoc.edu

Mark Ivanovich Bashmakov
10/02/1937 - 31/03/2022

Mark Ivanovich Bashmakov, Soviet and Russian mathematician, bibliophile, climber, teacher, author of several dozen textbooks and manuals for schoolchildren, doctor of physical and mathematical sciences, professor, full member of The Russian Academy of Education has passed away on 31 March, 2022, after a long disease.

Mark Bashmakov was born in Leningrad (USSR) on 10 February, 1937. He graduated from the Faculty of Mathematics and Mechanics of The Leningrad State University (now St. Petersburg State University) in 1959. After postgraduate studies he stayed to work there. In parallel with his work at The Leningrad State University, he was heading the Department of Higher Mathematics at the LETI University for 15 years since 1977. Later he was elected as a full member of The Russian Academy of Education in 1993. From 2002 till 2011 he was a head of the Laboratory of Productive Learning at the Institute of Content and Teaching Methods of The Russian Academy of Education. Then in 2011 he became a head of the Laboratory of Productive Pedagogy at the Institute of Pedagogical Education and Adult Education of The Russian Academy of Education. In 2003 Mark Bashmakov received an Award of the Government of The Russian Federation in the field of education for a set of textbooks "Mathematics for everyone".

In the process of implementing the concept of productive learning he has created a system of mass didactic games and competitions for promoting the increasing interest in knowledge and creative activity of students. This type of pedagogical activity became an evolution in the practice at traditional schools. By that way in 1992 under his lead-

Mark Ivanovich Bashmakov
10/02/1937 - 31/03/2022

ership the Institute of Productive Learning was founded in St. Petersburg. Thanks to this line of activity Mark Bashmakov brought to Russia the mathematical competition "Kangaroo" which was held there in 1994 for the first time. Since then he and the Institute of Productive Learning have been the official representatives of the international competition "Kangaroo" in Russia. Mark Ivanovich Bashmakov was not only a mathematician. He is well-known as a bibliophile. He collected rare books from the 1950s until the end of his life. He mainly collected works in the style of livre d'artiste (books with original graphics by famous artists of the 20th century). His collection consists of over 1200 rare and valuable books. In the 2010s he became an adviser of Mikhail Piotrovsky, director of The Hermitage. The Hermitage hosted 16 thematic exhibitions of books from Mark Ivanovich's collection. He donated The Hermitage 40 rarest books. A whole new trend in the work of The Hermitage including The Cabinet of the Artist's Book occurred from that gift. 4 books based on the materials of his collection were published.

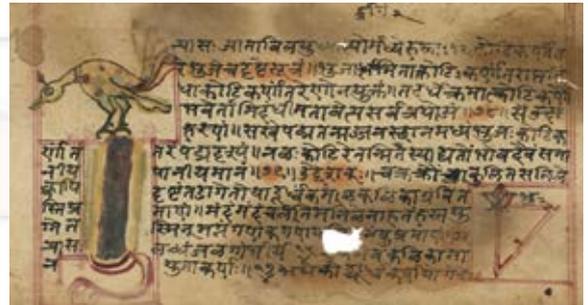Article by: Ekaterina Alekseeva

org@ipokengu.ru

If you are looking for some online math manipulatives, Mathigon is a game changer! You can manipulate the tiles and write/type on the screen as we go through the lesson together. If you haven't checked out it and taken time to explore all its features, you're seriously missing out!

One of the great activities in Mathigon is Timeline of Mathematics. It has a great design and has a compressed content. The history of mathematics on the website begins with the Ishango bone found in 20 thousand BC and continues until today's mathematicians. You can check this timeline with the link below.

https://mathigon.org/timeline

Ishango Bone

The **Ishango Bone** is possibly the oldest mathematical artefact still in existence: it was discovered in 1950, in the Democratic Republic of Congo in central Africa, and is named after the region where it was found. It is dates back to the *Upper Paleolithic* period of human history, and is approximately 20,000 years old.

The bone is 10 cm long and contains a series of notches, which many scientists believe were used for counting. The grouping of the notches might even suggest some more advanced mathematical understanding, like decimal numbers or prime numbers.