# Memorandum of Cooperation (MOC)

#### Between

#### The African Mathematical Union (AMU)

and

## The Association Kangourou Sans Frontières (AKSF)

This MOC is made between the African Mathematical Union (AMU) and the Association Kangourou sans Frontières (AKSF) on 1st November 2021.

The African Mathematical Union (AMU), registered association in Morocco, registration number 1254, Faculty of Sciences, Avenue Ibn Batouta, Rabat, Morocco. https://www.africamathunion.org/. <a href="mailto:amu2017president@gmail.com">amu2017president@gmail.com</a>, herewith referred to as the AMU.

The Association Kangourou sans Frontières (AKSF), registered association in France, nr.451 952 691 000257 (SIREN), Rue de Castellane 75008 Paris 8, France, www.aksf.org, info@aksf.org, herewith referred to as the AKSF.

#### PREAMBLE

The main goals of AKSF, which are also shared by the AMU, are:

#### popularization of mathematics among children, so that:

- children don't have prejudices towards mathematics (and can develop a positive attitude towards mathematics): Children and teenagers unfortunately often develop a negative attitude towards mathematics because of bad grades in school or more generally because of non-inspiring teachers, teaching or even curricula. Math Kangaroo goes in a different direction and tries to show that mathematics is much more than dull calculations but that mathematics is useful, that it can be fun and that it is everywhere.

- more children decide to study mathematics or something related (and do e.g. research in mathematics): Math Kangaroo can be an eye opener for talented students. They may on the one hand realize that they have a special talent for mathematics and they may on the other hand also realize that mathematics is fun, that mathematics can be applied and is useful which may motivate them to either study mathematics or a mathematics related STEM subject which is much needed in current times.

- a lot of children have a good experience with mathematics (and later as policy makers will look favorable towards mathematics): Even if students do not turn in the direction of STEM subjects Maths Kangaroo may give them a life lasting positive experience. And these young people will be the policy makers of the future so it is crucial that they realise the importance of mathematics. By being open about this and having had positive experiences this is more likely to happen.

The fact that the Math Kangaroo Competition is the largest international math competition in the world in terms of number of participants, makes it attractive for many students who would otherwise not take part in a mathematics competition. Many of the students become an awardee and that becomes a part of their biography.

# popularization of mathematics among wider population/society

With so many children taking part in the competition more parents are positively appreciating mathematics: Math Kangaroo, being as popular as it is right now, often reaches much further than the classroom. Children talk about it at home, parents and other people look at the questions and see the enthusiasm of the children and hence realize that this competition is first of all obviously very enjoyable but secondly also an important step in the development of so-called skills of the 21st century, e.g. critical thinking, analytical thinking, problem solving, strategies, decision making, etc.

In addition, teachers, especially at primary level (grades 1-6) find Kangaroo problems a nice tool to use in class.

# popularization of mathematics in developing countries,

Promoting learning and teaching mathematics in developing countries may come through competitions and awards for it. A competition requires more involvement of teachers and supports teachers by providing materials, which can be used in classroom teaching. It also allows them to build up a national network of interested and engaged teachers.

## In order to achieve the above mentioned common goals, there are plenty of reasons for a strong cooperation between AMU and AKSF, which both parties would benefit from:

Both the AMU and AKSF state in their documents a paragraph along the lines of "partnership with international mathematical unions, societies, associations, pursuing the same goals" so it is only natural to make this partnership formal.

AKSF has members from more than 80 countries; these members form an enormous international network with a lot of knowledge about the position of mathematics in the societies of the members' countries, about different curricula, about school systems, about university practices, about financing of education etc. This fits in well with the AMU's mission "Advancing mathematical research and education includes efforts and contributions towards the economic, social and cultural development of the continent"

AKSF members produce an enormous amount of materials which are freely shared within

the association. These can be used in classroom teaching and hence with in well with the newly formulated mission of the AMU: "Professional development of mathematics teachers".

Promote talent and giftedness in mathematics (and thereby minimize drop outs of gifted students)

AMU goals, activities, announcements can reach more recipients through AKSF members and through the AKSF Newsletter

With this Memorandum of Cooperation (MOC) both parties agree that all specific actions of cooperation will be discussed and agreed case by case.

Signed on behalf of the AMU

Signed on behalf of the AKSF

EL YACOUBI Nouzha, President

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**AKVELD** Meike, President

Date: November 01, 2021