Proposal for Sponsorship of an Undergraduate Mathematics Thesis Prize

Introduction

Mathematics is the driving force behind innovations in technology, finance, engineering, and countless other industries. By supporting the Mpemba Undergraduate Mathematics Thesis Prize, your company has the opportunity to nurture future leaders and innovators in mathematical sciences in Kenya. The Mpemba Prize, named after the late Erastus Mpemba—whose groundbreaking discovery of the Mpemba effect shaped a part of thermodynamics—will be the first prize of its kind in the country. The Prize, offered in conjunction with the Kenya Mathematical Society, aims to advance mathematical excellence in Kenya by recognizing outstanding undergraduate research and facilitating pathways for further academic growth.

Objective of the Prize

The Mpemba Prize aims to:

- **Encourage innovation:** Inspire students to explore both pure and applied mathematical research.
- **Reward excellence:** Acknowledge exceptional work that advances mathematical knowledge or provides real-world applications.
- **Foster mentorship:** Provide financial rewards and personalized mentorship from leading mathematicians.
- **Promote graduate studies:** Connect winners with top graduate programs globally, empowering them to pursue advanced academic opportunities.

Prize Structure

To ensure both students and their mentors are rewarded for their dedication to advancing mathematical research, the total prize amount will be distributed as follows:

- First Prize: \$1,000 for the student(s) and \$400 for their thesis advisor.
- Second Prize: \$750 for the first runner-up and \$300 for their thesis advisor.
- **Third Prize:** \$500 for the second runner-up and \$200 for their thesis advisor.

This structure not only incentivizes students but also acknowledges the crucial role of mentorship in the success of mathematical research.

Mentorship and Graduate Support

A unique aspect of the Mpemba Prize is its emphasis on **mentorship and academic advancement**. Alongside the financial rewards, each winning student will be paired with local and international leading mathematicians for personalized mentorship. These mentors will help guide students toward opportunities for further academic and professional growth, including graduate school applications to renowned institutions. Additionally, there will be opportunities for winners to connect with top academic and research institutions globally, which could facilitate scholarships or research fellowships.

Publicity and Recognition

To ensure visibility and recognition, we plan to allocate effort towards media outreach and event promotion. This will include announcements across traditional and digital platforms, including social media, academic journals, and university channels. Your company's name and logo will be prominently featured in all promotional materials and during the award ceremony. This sponsorship will align your brand with educational excellence and intellectual leadership in Kenya.

Budget Overview

To successfully run the prize for two years, we are seeking \$10,000 in sponsorship. Below is a breakdown of the proposed budget:

Expense	Cost Per Year	Total for 2 Years
Prize Money	\$3,150	\$6,300
Publicity and Event Promotion	\$1,000	\$2,000
Administrative Costs (10%)	\$500	\$1,000
Contingency Funds	\$350	\$700
Total	\$5,000	\$10,000

This budget includes all prize money, publicity costs, administrative fees, and a 10% allocation for the Kenya Mathematical Society's involvement in organizing the prize. Contingency funds are also included to cover unforeseen expenses.

Sponsorship Opportunities

We offer several sponsorship tiers to align with your company's goals and budget:

Sponsorship Level	Amount	Benefits
Full Sponsorship	\$10,000	Exclusive naming rights for the prize (e.g., "[Your Company] Mpemba Mathematics Thesis Prize"). Company logo featured in all promotional materials, media coverage, and award ceremony. Opportunity to address the audience at the award ceremony.
First Prize Sponsor	\$4,000	Naming rights for the First Prize. Company logo included in promotional materials and media.

Sponsorship Level	Amount	Benefits
Second Prize Sponsor	\$2,500	Naming rights for the Second Prize. Company logo featured in selected promotional materials.
Third Prize Sponsor	\$1,500	Naming rights for the Third Prize. Acknowledgment in all media and promotional activities.

Sponsoring this prize will grant your company high visibility in Kenya's academic community and beyond, creating a positive association with fostering talent, innovation, and educational excellence.

Organizing Committee

The prize will be organized and judged by a team of highly respected mathematicians in conjunction with the Kenya Mathematical Society, ensuring academic rigor, transparency, and fairness. The committee includes:

- **Dr. Geoffrey Mboya**, Postdoctoral Researcher, University of Oxford: Dr. Mboya is the founder of the Mfano Africa Mathematics Research Mentorship Program, which provides mentorship and research skills to pre-PhD students across Africa. A passionate advocate for widening participation in mathematical research, Dr. Mboya has empowered many students through his work at Oxford and his involvement in international collaborations.
- Salash Tolan Nabaala, Adjunct Faculty, Tallahassee State College: As a former recipient of a Harvard Mathematics Department grant, Salash volunteered at the University of Nairobi, where he taught a variety of subjects, ranging from LaTeX typesetting to 2-D topological quantum field theory. Here, his commitment to mathematics also extended to the training of Kenya's International Mathematical Olympiad (IMO) contestants, helping to nurture young talent in the field.
- **Dr. James Katende**, Senior Lecturer, University of Nairobi: Dr. Katende has been instrumental in organizing and leading Kenya's participation in both the Pan African Mathematics Olympiad and the International Mathematical Olympiad. His work has inspired and trained numerous young mathematicians, many of whom have gone on to succeed at international competitions and academic careers.
- **Prof. Balázs Szendroi**, University of Vienna: A renowned expert in algebraic and arithmetic geometry, Prof. Szendroi has been a pivotal figure in fostering collaboration between African and European mathematicians. His role in organizing workshops and securing grants has significantly boosted mathematical research and education in East Africa, particularly through initiatives like the Abram Gannibal Project.
- Dr. Michael Obiero Oyengo, Lecturer, Maseno University: Dr. Oyengo holds a PhD in Mathematics from the University of Illinois at Urbana-Champaign, specializing in analytic number theory. As the Chairman and founding member of the Kenya Mathematical Society, he is playing a vital role in shaping Kenya's mathematical landscape, guiding both students and fellow academics through his teaching and research. He is leading the effort to integrate technology in

the teaching and assessment of mathematics in tertiary institutions across Africa. He is the chair of the African STACK leadership team and is a member of the STACK international advisory board.

• **Dr. Beth Kiratu**, Mathematician and Secretary, KWIMSA: Dr. Kiratu works in operator theory and is a founding member of the Kenya Mathematical Society (KMS) and currently, she is the society's Treasurer. As the Secretary of the Kenya Women in Mathematical Sciences Association (KWIMSA), she is committed to promoting the inclusion and advancement of women in mathematics. Dr Kiratu is now a program leader (Data Science) at the Open University of Kenya.

Conclusion and Call to Action

We invite your company to sponsor the Mpemba Undergraduate Mathematics Thesis Prize and contribute to shaping the future of Kenya's mathematical landscape. Your investment in this initiative will not only highlight your company's commitment to education but will also create a lasting impact on Kenya's intellectual and academic future.

Let's collaborate to make this a reality. Please contact us to arrange a meeting and discuss how we can work together on this prestigious initiative.

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