

CV for Hajj Juma Kasozi, BSc, MSc(MAK), MSc(UZ), PhD (Mak sandwich with UiB - Norway).
Associate Professor, Department of Mathematics, SPS, CoNAS, Makerere University.

Full Names: Juma Kasozi.
Birth: 13th February, 1965 at Bweyogerere.
Contact Address: Department of Mathematics, Makerere University, P.O. Box 7062
Kampala, UGANDA.
Tel. +256 – 414 – 540692/ + 256 – 782 – 308010/ + 256 – 753 – 308010.
Designation: Associate Professor, Makerere University, Kampala.
Social Networks: facebook: www.facebook.com/juma.kasozi
skype: drjumakasozi
WhatsApp: +256782308010
LinkedIn: ug.linkedin.com/pub/dir/Juma/Kasozi

Research Interests

Insurance Mathematics and Financial Mathematics. Numerical methods and Optimisation techniques in risk theory, probability of ruin, dividends, Re-insurance, Investments, Pension schemes, Life and Non-Life insurance. ODeL (Open, Distance and eLearning).

Academic and Professional Qualifications

2002 – 2005 PhD. Makerere University-Uganda/University of Bergen-Norway. Awarded in 2006.

Thesis: Ruin and Optimal Control in an Insurance Portfolio that earns Returns on Investments.

1999 – 2001 MSc(Mathematical Modelling), University of Zimbabwe.

Award: University Book Prize 2000.

Courses done: Analysis and Probability, Stochastic Differential Equations, Financial Mathematics, Differential Equations for Mathematical Modelling, Optimisation, Numerical Methods for PDEs, Advanced Numerical Methods, Game Theory, Control Theory, Hydrodynamic Stability Theory.

Thesis: Application of Control Theory to Insurance.

1989 – 1994 MSC(Mathematics), Makerere University.

Courses done: Real Analysis, General Topology, Complex Analysis, Abstract Algebra, Measure Theory, Differential Equations, Numerical Analysis, Computer Science, Operations Research, Biomathematics, Further Abstract Algebra, Number Theory.

Thesis: The Distribution of Primes.

1986 – 1989 BSc(Hons), Makerere University. (Mathematics, Physics, Psychology).

1984 – 1986 A-Levels at Namilyango College. (Subjects: Physics, Chemistry, Mathematics).

1980 – 1983 O-Levels at Kyambogo College School.

1971 – 1979 Primary and pre-primary at Bweyogerere.

Publications, Research Work and External Examination

2019 *Working paper*: Ultimate ruin probabilities in an insurance model with stochastic investment returns.

2019 *Working paper*: Prediction of Prevalence of type 2 Diabetes in Rwanda using the Metropolis-Hasting Method. (with Angelique Dukunde, Jean Marie Ntaganda and Joseph Nzabanita).

2019 *Submitted*: Dividend maximization under a set ruin probability target in the presence of proportional and excess-of-loss reinsurance. Applications and Applied Mathematics (AAM). (with Christian Kasumo, Dmitry Kuznetsov). May, 2019.

2019 Maximisation of dividends in an insurance portfolio with a debt obligation for exponential claims. Far East Journal of Mathematical Sciences (FJMS), Vol. 116, No. 2, 141 – 156. (single authored).

2018 Minimizing the ultimate ruin probability in a diffusion-perturbed classical risk process compounded by proportional and excess-of-loss reinsurance. Int. J. Appl. Math. Stat., 57(5): 68 – 83. (with Christian Kasumo, Dmitry Kuznetsov).

2018 On minimizing the ultimate ruin probability of an insurer by reinsurance. J. Appl. Math. Volume 2018, Part I, DOI: 10.1155/2018/9180780, 11 pages. (with Christian Kasumo, Dmitry Kuznetsov). MathSciNet: MR3770640.

2017 External Examiner, Strathmore University, Kenya from 2017 for 3 years

2016 External Examiner, Department of Mathematics, Muni University from 2016 for 3 years

2016 External Examiner, Department of Mathematics, Busitema University 2016 for 3 years

2016 Maximisation of dividend payouts under infinite ruin probability constraints. International Journal of Mathematics and Computation, 27(4): 68 – 82. (with Nansubuga Martha, Fred Mayambala, Charles Wilson Mahera). MathSciNet: MR3492948.

2015 *Submitted*: Red-injective modules. Communications Algebra. (with Vincent Umutabazi, David Ssevviiri)

2013 Dividend payouts in a perturbed risk process compounded by investments of the Black-Scholes type. Far East J. Appl. Math., 82(1): 1 – 16. (with Charles Wilson Mahera). zbMATH: zbl1285.91058.

2013 Controlling ultimate ruin probability by quota-share reinsurance arrangements. Int. J. Appl. Math. Stat., 49(19): 1 – 15. (with Fred Mayambala, Charles Wilson Mahera)

2012 A methodological ICTs approach for demystifying the norm that teaching of Mathematics and Science for lower secondary education is hard. *in a book titled Special Topics in Computing and ICT Research - ISBN: 978 – 9970 – 25 – 128 – 5.*

- 2011 Dividend maximisation in the Cramer-Lundberg model using HAM. *J. Mathematics and statistics*, 7(1) Pages 61–67. (with Fred Mayambala, Charles Wilson Mahera). zbMATH: zbl1219.91070.
- 2011 External Examiner, Department of Mathematics, Mbarara University of Science and Technology from 2011 for 3 years
- 2009 External Examiner, Department of Mathematics, Kyambogo University 2008/2009 for 3 years.
- 2009 Risk and Insurance. *Business Friends Africa Journal*, 9 Pages 35 – 36.
- 2009 External Examiner, Department of Mathematics, Islamic University in Uganda, Mbale up to 2011. Renewed for 3 years 2012 - 2014. Renewed for another 3 years 2015 - 2017.
- 2008 Senior Researcher on 4 year project: UPGRADING THE TRAINING OF MATHEMATICS AND SCIENCE TEACHERS BY INCORPORATING ICTs THROUGH OPEN, DISTANCE AND e-LEARNING (ODeL) IN UGANDA, Project number MSI/WB2/2/24/08 funded by the Millennium Science Initiative (MSI) and coordinated by Uganda National Council for Science and Technology (UNCST).
- 2005 Guest Editor, *International Journal of Management and Systems (IJOMAS)*. ISSN: 0970-7328. Special issue on Biomathematics. Part 1. Vol. 21 No. 2 May - August.
- 2005 Guest Editor, *International Journal of Management and Systems (IJOMAS)*. ISSN: 0970-7328. Special issue on Biomathematics. Part 2. Vol. 21 No. 3 September - December.
- 2005 Flow of dividends under a constant force of interest. *Am. J. Applied Sci.*, 2(10) Pages 1389 – 1394.
- 2005 Numerical ultimate ruin probabilities under interest force. *J. Math and stat.*, 1(3) Pages 246 – 251. zbMATH: zbl1142.60391. MathSciNet: MR2208867.
- 2005 Number Theory Book, Department of Distance Education format.
- 2005 A numerical method to find the probability of ultimate ruin in the classical risk model with stochastic return on investments. *Insurance: Math. and Econ* Vol. 36 Issue 3 Pages 399 – 420. (with Jostein Paulsen and Andreas Steigen). zbMATH: zbl1242.60071. MathSciNet: MR2152852.
- 2004 Making Education Technologies Work: A Gender Analysis of the E-learning Programs in Makerere University, KAMPALA. A Research Report Submitted to the Multi-Disciplinary Research Competition Committee (FACULTY OF SOCIAL SCIENCES AND SIDA SAREC).
- 2004 Modelling of Biological and Biomedical Processes ISBN 9970 418 14 3.
- 2003 Research in Insurance Business. Proceedings of East African Universities Mathematics Programme Workshop: Strengthening Inter-Universities Cooperation in Mathematics in East Africa and Sweden at the College of Physical and Biological Sciences, University of Nairobi.
- 2003 Abstract Algebra I Groups ISBN 9970 423 09 4. First Edition, Department of Distance Education, Makerere University.
- 2003 Real Analysis ISBN 9970 423 10 3. First Edition, Department of Distance Education, Makerere University.
- 2001 Application of Control Theory to Insurance. University of Zimbabwe MSc(Mathematical Modelling) thesis.

1994 The Distribution of Primes. Makerere University MSc(Mathematics) thesis.

1992 The Mini Assembler for the 6502 micro processor in Basic. Research project for MSc part one.

Reviews: Books, Monographs, Academic Programmes

- * Wrote the modules for the MAJOR and MINOR Mathematics programme for Soroti University - Soroti, 2013.
- * Semesterised the PhD (Mathematics) programme at Makerere University, 2011.
- * Wrote a MAJOR and MINOR Mathematics programme for Nile University - Arua, 2010.
- * Wrote an MSc (Pure Mathematics) and MSc (Mathematical Modelling - Applied Mathematics) programmes for the Department of Mathematics, Makerere University, 2009.
- * Reviewed the undergraduate programme in mathematics at Makerere University , 2009.
- * Wrote Mathematics part of Bachelor of Science Education programme for Busitema University, 2006/2007.
- * Report on Elearning programs and facilities in Uganda, 29th June, 2007. Consultant agreement No. CA-ATP-07/001 with United Nations Office for Project Services (UNOPS).
- * Wrote Mathematics MAJOR and MINOR for Nkumba University and Financial Engineering programme for Nkumba University, 2006.
- * UNESCO Nairobi Office. e-content development, review of CDs on Maths Modules: Vector Calculus, Statistical Inference, and Computing Techniques. Contract No. 810.388.5. September and October, 2005.
- * A Course in Ordinary Differential Equations by J.Y.T. Mugisha and L.S. Luboobi, ISBN 9970 423 19 5. First Edition, Department of Distance Education, Makerere University.
- * Introduction to Number Theory by J.M. Mango. (manuscript is currently with the Editor).
- * Numerical Analysis II by J.M. Mango. (manuscript is currently with the Editor).
- * Elements of Mathematics by C.O. Okurut. (manuscript is currently with the Editor).
- * Mathematics for Chemistry by J.M. Mango. (manuscript is currently with the Editor).
- * Introduction to Integral Calculus by J.M. Mango. (manuscript is currently with the Editor).

Teaching Ability and Experience

2019 Visiting Professor, Department of Mathematics, University of Rwanda, Kigali. I taught a graduate course: MAT6366: Mathematics of Insurance and Finance from 15th April to 15th May, 2019.

2012 Guest Lecturer, Department of Mathematics, National University of Rwanda, Butare. I taught a graduate module in Insurance Mathematics to graduate students in April 2012.

- 2012 Guest Lecturer, Department of Mathematics, University of Dar es Salaam, Dar es Salaam, Tanzania. I taught a graduate course in Insurance Mathematics to NOMA M.Sc 2011/2012 students in March 2012.
- 2011 Guest Lecturer, Department of Mathematics, University of Dar es Salaam, Dar es Salaam, Tanzania. I taught a graduate course in Insurance Mathematics to NOMA M.Sc 2010/2011 students in January 2011.
- 2010 Awarded AAU Staff Exchange Programme fellowship 2010.
- 2010 Guest Lecturer, Department of Mathematics, University of Dar es Salaam, Dar es Salaam, Tanzania. I taught a graduate course in Insurance Mathematics to NOMA M.Sc 2009/2010 students in January 2010.
- 2009 Guest Lecturer, Department of Mathematics, University of Dar es Salaam, Dar es Salaam, Tanzania. I taught a graduate course in Insurance Mathematics to NOMA M.Sc 2008/2009 students in January 2009.
- 2008 AMMSI RESEARCH/VISITING SCIENTIST FELLOWSHIP AWARD 2007. I used the award to teach a graduate course in Financial Mathematics at the University of Dar es Salaam, TANZANIA.
- * 1990 to date: Teaching, Department of Mathematics, Makerere University. My teaching interests range from pure to applied mathematics. I am a Dutch trained Elearning Instructor and I have interests in Elearning, both teaching it and researching in it.
 - * 1994–2007 Lecturer, Department of Mathematics, Makerere University and Part-time Lecturer, Islamic University in Uganda, Mbale.
 - * 1999–2001 Teaching Assistant (and MSc student) at the Department of Mathematics, University of Zimbabwe.
 - * From November 1990, part-time teaching assistant in the Department of Mathematics Makerere University, later full-time Teaching Assistant and eventually, a Lecturer in the same Department.
 - * 1993 – 1995 Part-time Senior Computer Specialist/Instructor in Uganda Posts and Telecommunications Corporation.

Supervision and examination of Graduate Research

ongoing:

- * Masoud Komunte (2019). Insurance Portfolio Optimization with Possibilities of Recovery after Ruin. PhD thesis, The Nelson Mandela African Institute of Science and Technology, Arusha, Tanzania.
- * Nelson K. Yego Kemboi (2019). Using Machine Learning for Insurance Uptake Prediction in Kenya. PhD thesis, University of Rwanda, ACE-DS.
- * Felix Ndayambaje. Mathematical optimization methods in portfolio analysis of insurance companies. PhD thesis, University of Rwanda, ACE-DS.

- * Clementine Ndayiragije (2019). Pricing Insurance Policies that are Contingent upon Transitions between Certain States. MSc dissertation, University of Rwanda.
- * Nicholas Bett (2019). Incorporation of Causation in Modeling and Forecasting Mortality and Longevity risks using Machine Learning in Kenya. PhD thesis, University of Rwanda, ACE-DS.
- * Iyakaremye Jean Pierre (2019). Modelling credit risks for life insurers using logistic regression methods. PhD thesis, University of Rwanda, ACE-DS.
- * Edison Mayanja (2018). Modeling the HIV-HCV Co-infection Dynamics and Control Strategies. Ph.D dissertation, Makerere University.
- * Herbert Mukalazi (2018). Mathematical models for dynamic stochastic asset-liability management of Uganda's retirement benefits schemes. Ph.D dissertation, Makerere University.
- * Angelique Dukunde (2018). Markov Chain Monte Carlo methods for predicting diabetes and hypertension in Rwanda. PhD thesis, University of Rwanda, ACE-DS.
- * Yasin Kikabi (2016). Multi-agent stochastic simulation for multivariate time series: A case study of the East African stock markets. PhD thesis, Makerere University(UGANDA)/Uppsala University (SWEDEN).
- * Bernard Owere(2014). Optimal Dividends in a Stochastic Environment. MSc dissertation, Makerere University.

Completed:

- * Christian Kasumo (2019). Optimisation of dividend payouts and reinsurance policies under a set ruin probability target. PhD thesis, The Nelson Mandela African Institute of Science and Technology, Arusha, Tanzania.
- * Bumali Mwanda (2018). Controlling Risk Exposure by Quota-share Reinsurance for a Company with a Debt Liability. MSc dissertation, Makerere University.
- * Fred Mayambala (2017). Portfolio optimisation under transaction costs and cardinality constraints. PhD thesis, Makerere University(UGANDA)/University of Linkoping(SWEDEN).
- * Peter Amutuheire (2015). On Conditions under which a prime ideal is completely prime. MSc dissertation, Makerere University.
- * Vincent Umutabazi (2015). Generalisations of Injective Modules: Red-Injective and Strongly Red-Injective modules. MSc dissertation, Makerere University.
- * Herbert Mukalazi (2014). Portfolio optimisation under transaction costs and borrowing constraints in continuous time. MSc dissertation, Makerere University.
- * Agnes Joseph (2013). Minimising the probability of ultimate ruin by excess of loss reinsurance and investments. MSc dissertation, University of Dar es Salaam.
- * Martha Nansubuga (2013). Dividend maximisation in an insurance process compounded by investment returns under ruin probability constraint. MSc dissertation, University of Dar es Salaam.
- * Samya Suleiman (2012). Flow of dividends in classical risk model with investment returns. MSc dissertation, University of Dar es Salaam.

- * Dennis Wokiya (2012). Maximising investment returns of an insurance company while minimising the probability of ruin. MSc dissertation, University of Dar es Salaam.
- * Simataa Lubasi (2010). Numerical finite horizon ruin probabilities in the classical risk model with stochastic return on investments. MSc dissertation, University of Dar es Salaam.
- * Christian Kasumo(2010). Minimizing the Probability of Ultimate Ruin Under Proportional Reinsurance and Investments. MSc dissertation, University of Dar es Salaam.
- * David Ssevviiri (2010). On rational and integral quadratic forms. MSc dissertation, Makerere University.
- * Rita Nankanja (2009). ICT and distance education in Makerere and Kyambogo Universities.
- * Fred Mayambala (2009). Dividend maximization in an insurance process compounded with Black and Scholes investment. MSc dissertation, University of Dar es Salaam.
- * Abdallah Ziraba (2009). The role of information and communication technology in the management of selected secondary schools in central Uganda.
- * Venance Mpalanzi (2009). Portfolio Investment with proportional transactions costs and uncertain time horizon: a case of two assets. Sc dissertation, University of Dar es Salaam.

Examination of dissertations/theses:

- * Strathmore University - KENYA
- * Makerere University - UGANDA
- * University of Kwazulu-Natal - SOUTH AFRICA
- * University of Dar es Salaam - TANZANIA
- * University of Botswana - BOTSWANA
- * University of Capetown - SOUTH AFRICA
- * Pan African University (Institute for Basic Sciences, Technology and Innovation) - KENYA
- * The Nelson Mandela African Institute of Science and Technology

other:

- * Graduate/Seminar coordinator, Department of Mathematics, Makerere University 2002 to 2008.

Other Academic activities: Seminars, Workshops, Conferences

- * IUCEA workshop on finalising bench marks for undergraduate and postgraduate programmes in Mathematics for the region, 20th - 23rd January, 2020 at Palace Hotel Arusha, Tanzania.
- * Workshop on PhD students supervision held at African Center of Excellence in Data Science (ACE-DS), Gikondo campus, University of Rwanda, Kigali, Rwanda from 23rd - 27th September, 2019.

- * IUCEA workshop on developing bench marks for Mathematics for the region, 18th - 24th August, 2019 at Ngurdoto Mountain Lodge, in Arusha, Tanzania.
- * 4th Network Meeting for Sida- and ISP- Funded PhD Students and Postdocs in Mathematics under the theme: Strengthening Research and Postgraduate Training in Mathematics in Universities in Africa in Universities held at Pyramid Hotel, Bishoftu, Ethiopia from 4th to 10th August, 2019.
- * Workshop on the status of science education and performance in the secondary sciences in national examinations held on 16th May, 2019 at Forest Cottages, Bukoto.
- * SAMSA 2018 conference that took place from 18th November 2018 to 23rd November 2018 at Botswana International University of Science and Technology, Palapye, Botswana. I presented a paper entitled: A numerical method to find the probability of ultimate ruin in an insurance model with stochastic investment returns.
- * 3rd Network Meeting for Sida- and ISP- Funded PhD Students and Postdocs in Mathematics under the theme: Strengthening Research in Mathematics in Universities with Sida and ISP Support held at Imperial Botanical Beach Hotel, Entebbe, Uganda from 20th to 24th August, 2018.
- * EMMI-AAA 2018 International workshop on Engineering Mathematics and Mathematics in Industry - Algebra, Analysis and Applications held at Malardalen University, Vasteras, Sweden on 30th May 2018. Paper presented: Optimal dividends for risk processes with stochastic return on investments.
- * Workshop on PhD students supervision held at African Center of Excellence in Data Science (ACE-DS), University of Rwanda, Kigali, Rwanda from 11th March, 2018 to 14th March, 2018.
- * SAMSA 2017 conference that took place from 20th November 2017 to 23rd November 2017 at Lush Garden Hotel, Arusha, Tanzania (hosted by the University of Dar es Salaam). I presented a paper entitled: Numerical Ultimate Ruin Probabilities for an Insurer who undertakes Risk-free Investments.
- * DFG-AIMS workshop on incomplete market methods applied to weather and Agricultural risks (IMMAWA) held at AIMS, Bagamoyo, Tanzania from 19th-25th February, 2017. Paper presented: Enhancing the survival of an insurer by quota-share reinsurance plans.
- * Review of MSc curricula workshop under Sida Bilateral program held at Arusha Technical College, from 25th January 2016 to 29th January, 2016. The MSc programs offered at Makerere University, University of Rwanda and University of Dar es Salaam were collectively reviewed with an aim of making them almost similar.
- * EAUMP 3rd conference on theme: Advances in Mathematics and its Applications at Department of Mathematics, Makerere University, Kampala, UGANDA from 26th October to 28th October, 2016. Paper presented: Optimal dividends for risk processes with stochastic return on investments.
- * PhD Curriculum Development and Makerere Sida Phase III science sub-program dissemination workshop that took place from 22nd September 2015 to 26th September 2015 at Mathematics Department, University of Dar es Salaam, Tanzania.

- * NAPRECA Makerere Sida Phase III science sub-program dissemination (2010-2015) symposium that took place from 30th August 2015 to 4th September 2015 at Palace Hotel and New Safari Hotel, Arusha, Tanzania. I co-presented a poster on Phase III Results.
- * PhD Curriculum Development and Makerere Sida Phase III science sub-program dissemination workshop that took place from 18th June 2015 to 22nd June 2015 organised by University of Rwanda, held at Nobleza Hotel, Kigali, Rwanda.
- * SAMSA 2014 conference that took place from 23th November 2014 to 29th November 2014 at Elephant Hills Hotel, Victoria Falls, Zimbabwe. I co-presented a paper entitled: Development of a 2D Vertically Integrated Shallow Water Equation Model of Lake Victoria.
- * HEI ICI workshop on Mathematics Education and Working Life Relevance held at AICAD building, Jomo Kenyatta University of Agriculture and Technology, JUJA, Nairobi, Kenya in collaboration with Lappeenranta University of Technology, Finland and PAU Institute for Basic Sciences, Technology and Innovation 31th July to 5th August, 2014. Paper presented: Building academia-industry cooperation in Uganda.
- * The Eastern Africa summer school on Representation Theory held 6 - 27th July 2014 at Arusha Technical College, Arusha, Tanzania.
- * HEI ICI workshop on Mathematics Education and Working Life Relevance held at Department of Mathematics, Makerere University, Kampala, UGANDA in collaboration with Lappeenranta University of Technology, Finland from 2nd December to 12th December, 2013.
- * SAMSA 2013 conference that took place from 24th November 2013 to 30th November 2013 at University of Stellenbosch, Capetown, South Africa. I co-presented a paper entitled: Dividend maximisation under a ruin constraint in a surplus process compounded with a constant force of interest.
- * The International Science Programme (ISP) reference group meeting on EAUMP held at Speke Resort and Conference centre, Munyonyo and hosted by the Department of Mathematics, Makerere University from 22nd September to 25th September, 2013.
- * The International Biometry international workshop on modeling infectious diseases in Uganda and Africa, current status and future challenges held at Makerere University from 2nd September to 4th September, 2013.
- * HEI ICI workshop on Mathematics Education and Working Life Relevance held at NM-AIST, Arusha, Tanzania in collaboration with Lappeenranta University of Technology, Finland from 24th June to 5th July, 2013.
- * Second Kenyatta University International Mathematics conference held at Kenyatta University, Nairobi, Kenya from 17th - 21st June, 2013. Paper presented: MARM contributions to scholarship and research in Uganda.
- * SAMSA 2012 conference that took place from 26th November 2012 to 1st December 2012 at Crossroads Hotel, Lilongwe, Malawi. I co-presented a paper entitled: Hydrodynamics of Shallow Water Equations: A case study of Lake Victoria.
- * 10th Anniversary of Eastern Africa Mathematics Program (EAUMP) 2012 conference held at Nelson Mandela African Institute of Science and Technology, Arusha, Tanzania from 21st August to 25th August, 2012.

- * SAMSAs 2011 conference held at New Fairmount Hotel, Livingstone, Zambia 27th November to 3rd December, 2011. Papers presented: Proportional reinsurance on probability of ruin in a surplus process compounded with a constant force of interest and Three dimensional hydrodynamic model of tropical Lake Victoria.
- * First Kenyatta University International Mathematics conference held at Kenyatta University, Nairobi, Kenya from 8th - 10th June, 2011. Paper presented: MARM in Uganda.
- * The Eastern Africa summer school on Linear Algebra and the fast fourier transform held 6 - 17th December 2010 at Makerere University, Kampala, Uganda.
- * SAMSAs 2010 conference held at Botswana University of Agriculture, Gaborone 29th November to 4th December, 2010. Paper presented: Numerical Ultimate Ruin Probabilities for a risk process compounded by risk-free investments.
- * SAMSAs 2009 conference held at the University of Dar es Salaam, Dar es Salaam, Tanzania from 25th November to 28th November, 2009. Paper co-presented: Dividend maximisation in the Cramer-Lundberg model using HAM.
- * 3rd African Regional Conference of Vice Chancellors, Provosts and Deans of Science, Engineering and Technology (COVIDSET 2009), 23rd - 25th November, 2009. hosted by Makerere University at Speke Commonwealth Resort, Munyonyo, Kampala. I was on the LOC.
- * Conference on Economic Epidemiology held at Makerere University, Kampala from 3rd August to 5th August 2009.
- * Africa Summer Institute (ASI) on Economic Epidemiology held at Makerere University, Kampala from 18th July to 31st July 2009.
- * Symposium on the African Woman and Mathematics held at the Eduardo Mondlane University, Maputo, Mozambique from 29th November to 30th November, 2008.
- * SAMSAs 2008 conference held at the Eduardo Mondlane University, Maputo, Mozambique from 24th November to 28th November, 2008. Paper presented: Numerical finite horizon ruin probabilities in the classical risk model with stochastic return on investments.
- * Workshop on Review of the B.Sc Education Curriculum held at the Makerere University Department of Food Science and Technology Conference Hall from 9th September to 10th September, 2008.
- * SAMSAs 2007 conference held at the University of Namibia, Windhoek from 27th November to 30th November, 2007. Paper presented: Flow of Dividends for risk processes with stochastic return on investments.
- * Modeling in Mathematics Learning: Approaches for classrooms of the future workshop held at Makerere University, Kampala UGANDA from 23rd - 25th July 2007. Paper co-authored: Modeling the dynamics of teacher qualifications and student drop out rates.
- * SAMSAs 2006 conference held at the University of Botswana , Gaborone from 27th November to 1st December, 2006 . Paper presented: Dividend optimisation for risk processes with stochastic return on investments.

- * SAMSAs 2005 conference held at the University of Malawi , Blantyre from 28th November to 2nd December, 2005 . Paper presented: Flow of dividends under a constant force of interest.
- * Researcher’s workshop of Makerere University NUFU Basic Sciences Project 33/2002, Makerere University, 17th August, 2005.
- * Training workshop for writers of Bachelor of Science (External) degree programme by Distance Education organised by the Department of Distance Education, Institute of Adult and Continuing Education, JOKAS HOTEL, Kampala 20-25 February 2005.
- * SAMSAs 2004 conference held at the University of the North - South Africa from 29th November to 3rd December, 2004. Paper presented: A simple numerical method to find the probability of ultimate ruin in the classical risk model compounded by a constant force of interest.
- * 1st Pan African Biomathematics Congress, 8th - 12th December, 2003. Makerere University, Kampala.
- * East African Universities Mathematics Programme (EAUMP) workshop, Chiromo Campus, University of Nairobi, 17th - 20th March, 2003. Paper presented: Research in Insurance Business
- * School and Conference on Probability Theory, Miramare - Trieste, Italy 13th - 31st May, 2002.
- * Issues in Mathematics Education in Uganda. First Uganda Mathematical Conference held July - August, 1996.

Computer Competency (Seminars, Workshops, Conferences)

- * I program using ForTran, with less usage of Java, Basic and C.
- * I use most of the Microsoft Applications and sister software.
- * Mathematical software includes: MatLab, Maple, LATEX, Cabri 3, Cabri Geometry.
- * Training workshop for writers of Bachelor of Science (External) degree programme by Distance Education organised by the Department of Distance Education, Institute of Adult and Continuing Education, JOKAS HOTEL, Kampala 20 – 25 February 2005.
- * Training of Trainers in E-learning at Makerere University - Kampala, August 2003 to September 2003.
- * Capacity Building and Policy Development in E-learning in Higher Education course at the Faculty of Technology, Policy and Management, Centre for Education and Technology, Delft University of Technology, 4th to 27th April, 2002. I qualified as a trainer/instructor in E-learning.
- * ICT in Education workshop at Makerere University, Kampala that was organised by Institute of Computer Science, Makerere University, UGANDA in conjunction with Delft University of Technology, NETHERLANDS and sponsored by Nuffic Special Fellowships Programme (Netherlands), 5 – 6 February, 2002.
- * Training workshop for writers of Bachelor of Science (External) degree programme by Distance Education organised by the Department of Distance Education, Institute of Adult and Continuing Education, Makerere University, 13 – 19 August 2001.

- * Attended computer courses at the University of Zimbabwe in PC-TEX/LATEX, Maple5, Mat-Lab, August 1999 - March, 2001.
- * Computer Based Training and Distance Learning Tripartite Training workshop from 22 – 24 January, 1998. Topics covered: concept of distance learning, Tools necessary for computer based training (efficient telephone/data lines, multimedia computers, printers, modems, routers, codecs, facsimiles, Audio/visuals, systems and application software, terrestrial or satellite links, Very Small Aperture Terminals-VSATs), Ways employed to exchange information (email, facsimile, teleconferencing, videoconferencing, voice mail, FTP, bulletin boards, newsgroups), benefits.
- * Customer Relations Management training of trainers course by British Telecom, 2 – 13 September, 1996.
- * Data and communication seminar organised by the Uganda Institute of Professional Engineers, 25 July, 1996.
- * Instruction techniques and computer based training skills course at Telecom Eireann Training Center, 80 Harcourt Street, Dublin 2, IRELAND from 30 September to 20 November, 1995. Courses covered: Techniques of instruction(Instructor checklists, Audio Visuals, stages of learning and why people learn, effective training, why, how and when to evaluate a course, instructor-learner relationships), Business Communications, C-programming fundamentals, Data and modems, Advanced Windows, UNIX operating system, LANs, WANs, Word, Access, Freelance Graphics, Power Point, Data Analysis, Network Administration, PC-trouble shooting.
- * Competency Based Education (CBE) workshop at Uganda Posts and Telecommunications training Institute, 29 November - 10 December, 1993.
- * Sixth International workshop on the use of micro computers in Science and Mathematics Education in Africa that was organised by International Center for Theoretical Physics, 28 June - 7 July, 1993.
- * Computer Specialists and Trainers seminar in Informatics at the Institute of Computer Science, Makerere University that was organised by the Intercontinental Informatics Program (IIP) in conjunction with UNESCO, 2 – 6 December, 1991.

Service to the University and the Community

- * 2018 Joined Lions Club of Makerere as Charter member number 4984365, Makerere(136074), Lions District 411B. Currently serving as Membership Chairperson, Lionistic year 2018/2019. WE SERVE.
- * 2015 Co-Chair, Selection Committee, The Mastercard Foundation Scholars Programme. I am part of the selection of sstudents for the scholarship.
- * 2015 Member, Steering Committee, The Mastercard Foundation Scholars Programme at Makerere University.
- * 2015 Promoted to rank of Associate Professor of Mathematics at Makerere University.
- * 2013 As DEAN, I was a Senator, Makerere University Senate. I served in Senate and was seconded to many of its committees.

- * 2013 Appointed, DEAN, School of Physical Sciences, College of Natural Sciences, Makerere University for 4 years effective 1st October, 2013.
- * 2009 Appointed, HEAD, Department of Mathematics, Makerere University for a term of 4 years.
- * 2009 Appointed, Ag. HEAD, Department of Mathematics, Makerere University until a substantive head was appointed.
- * Makerere node coordinator: Eastern Africa Universities Mathematics Programme (EAUMP) supported by ISP - Sweden. Other countries in the network are Tanzania, Rwanda, Kenya and Zambia.
- * Coordinator for Uganda, NOMA project. This is a capacity building project at MSc level based at University of Dar es Salaam and supported by NOMA - Norway. Scholarships are available for students from Uganda, Zambia, Mozambique, Tanzania and Malawi only.
- * Mathematics Coordinator for the Department of Distance Education, BED (External) and BSc (External) programmes, Makerere University.
- * Chairperson, College of Natural Sciences, Makerere University E-learning and ICT resources committee.
- * Chaired several Makerere University Procurement meetings.
- * Member, Loans Committee, Makerere University Employees' Savings and Credit Society.
- * Member, Uganda Mathematical Society.
- * Steering committee member, The Mastercard Foundation at Makerere University
- * Member, Uganda National Academy of Sciences.
- * Member, Senate committee on restructuring of Makerere University Academic programmes
- * Chairperson, Board of Directors, Entebbe Girls School - Entebbe.
- * Served on anti-sexual harassment committee of senate
- * Member, Board member, Sir Apollo Primary Schools.
- * member, Admissions committee at Makerere university.
- * Member, Makerere University Mature Age and Pre-entry examinations committee.

Membership to Professional bodies

- * On Coordination Committee: Eastern Africa Universities Mathematics Programme (EAUMP) supported by ISP - Sweden. Other countries in the network are Tanzania, Rwanda, Kenya and Zambia.
- * On Steering Committee of NOMA project. This is a capacity building project at MSc level based at University of Dar es Salaam and supported by NOMA - Norway. Scholarships are available for students from Uganda, Zambia, Mozambique, Tanzania and Malawi only.

- * Member, Uganda National Academy of Sciences.

Professional Practice and Outreach activities

- * Active in Uganda Mathematical Society outreach programmes.
- * Given expert lectures in Insurance Mathematics to students at Makerere University, University of Dar es Salaam and National University of Rwanda.

Innovations, Projects, Grants, Resource Mobilisation, Financial Management

- * USD 2 million Skills Audit for Northern Corridor Integration Projects 2015 – 2016.
- * SEK 39 million SIDA for capacity building in mathematics and its applications at PhD and postdoctoral levels to run 2015 – 2020. The other collaborators in Sweden are Mathematics Departments at Linköping University, Stockholm University, Uppsala University, Royal Institute of Technology and Malardalen University.
- * USD 1.2 million MSI grant for the 4 year project: UPGRADING THE TRAINING OF MATHEMATICS AND SCIENCE TEACHERS BY INCORPORATING ICTs THROUGH OPEN, DISTANCE AND e-LEARNING (ODEL) IN UGANDA, Project number MSI/WB2/2/24/08 funded by the Millennium Science Initiative (MSI) and coordinated by Uganda National Council for Science and Technology (UNCST) (2009-2012).
- * Pounds 2000 from MARM for a staff exchange with University of Bath in November, 2012.
- * SEK 5,276,720 from ISP for EAUMP Network for the year 2008 – 2010
- * SEK 2,953,296 from ISP for EAUMP network for the year 2011
- * SEK 2,888,696 from ISP for EAUMP network for the year 2012
- * SEK 2,604,096 from ISP for EAUMP network for the year 2013
- * NK 8,342,750 from NORAD for Norads programme for masters Studies(NOMA) - IDNOMAPRO-2007/10057.
- * Ug. Shs. 30 millions on average - managed as Treasurer, UMS from 2007 - 2009.
- * Ug. Shs. 70 million on average - managed as Chairperson, Entebbe Girls School from 2005 to date.
- * USD 1,000 IUCEA support to staff exchange to UDSM per year for the years 2008, 2009 and 2010.
- * USD 5,000 AMMSI support to give lectures in Financial Mathematics at UDSM in 2007.
- * USD 6,570 AAU support to give lectures in Insurance Mathematics at UDSM in 2009.
- * USD 60,000 PHEA support to project: GENDER PERCEPTIONS OF STAFF AND STUDENTS ON ACCESS AND USE OF EDUCATIONAL TECHNOLOGY IN TEACHING AND LEARNING AT MAKERERE UNIVERSITY

- * USD 180,000 SIDA bilateral research project: Mathematical modelling of Eutrophication and pollution in lake Victoria 2010 – 2014 subproject on: Enhancing Capacity in Basic Science Research and Training for Sustainable Development.
- * Ug. Shs. 60 million Department of Mathematics monthly transfers.
- * Mathematics coordinator of The Norwegian Programme for Development, Research and Education (NUFU) Pro 39.2/91 1998 – 1999.

Referees

- * Prof. Gregory .K. Sankaran,
Department of Mathematical Sciences,
University of Bath,
Bath BA2 7AY, ENGLAND.
gks@maths.bath.ac.uk
+44 1225 386220.
- * Prof. Livingstone S. Luboobi,
Professor of Mathematics (former Vice Chancellor),
Makerere University,
c/o P.O. Box 7062, Kampala, UGANDA.
luboobi@cns.mak.ac.ug and luboobi at
+256 712 848110.
- * Prof. John R.S. Tabuti,
Professor of Ethnobotany,
College of Agricultural and Environmental Sciences,
Makerere University,
P.O. Box 7062, Kampala, UGANDA.
jtabuti@muienr.mak.ac.ug
+256 772 960880.
- * Dr. V.A. Ssembatya,
Director, Quality Assurance,
Makerere University,
P.O. Box 7062, Kampala, UGANDA.
vas@qad.mak.ac.ug
256 772 374144.

Signed:



this day Tuesday, 29th January of year 2020 by Hajj Juma Kasozi, PhD.