

# Mikael Passare 1959—2011

Mikael Passare was born in Västerås, Sweden, on January 01, 1959, and died in an accident in Oman on September 15, 2011.

His death is a loss, and not only for mathematics. He was not only an outstanding mathematician, but a beautiful human being as well . . . a rare species, indeed.

He was very active in the creation of the Pan-African Centre for Mathematics (PACM), to be established in Dar es-Salaam. Mohamed E. A. El Tom, now Chairperson of the PACM Board, says that had it not been for Mikael, PACM would have remained a mere idea in the head of its initiator, i.e., Mohamed himself. He started working with great conviction and enthusiasm on the idea when Mohamed first suggested it to him while they were walking on a Meroetic archeological site near Khartoum in April, 2004.

First, he discussed the idea of the Centre with the Vice-Chancellor of Stockholm University and only when he was assured of the Vice-Chancellor's approval of the idea in principle, did he present it to the Department of Mathematics at Stockholm University. While the department did not object to the idea, it was only natural that some members raised many significant issues that required clarification. Mikael persisted and he maintained correspondence with Mohamed on these and related issues for more than two years at the end of which he managed to secure the approval of the department to collaborate in establishing the Centre at some suitable university in Africa. Later he was an influential member of the committee that short-listed African universities for hosting PACM. Subsequently, he was a member of a delegation which was led by Stefan Nordlund, Dean at Stockholm University, and which visited some of the short-listed universities and made appropriate recommendations to the Vice-Chancellor.

Mikael never stopped to give the Centre of his precious time. His last assignment was to chair and constitute a search committee for the Director of the Centre, a process he initiated before he was asked by the Board of the Centre to undertake it. Such was Mikael, ahead of others in thinking and working to realize important objectives without being asked to do so. When Mohamed conveyed to him the Board's decision regarding the search committee, he responded promptly, accepting the charge and promised to respond with detailed ideas upon his return from his trip to Dubai, Oman, and Tehran.

Mikael's commitment and enthusiasm for the Centre was not less than anybody else's, if not greater. He was so confident that the grand objective of establishing a worldclass Centre of Mathematics in Africa is attainable.

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Mikael was a student at Uppsala University from 1976 and got his PhD there in 1984 with Christer Kiselman as advisor. He spent the academic year 1980-1981 at Stanford University; 1981-1982 at Moscow State University, and 1986-1987 at Université Pierre et Marie Curie, Paris.

He was a professor at Stockholm University since 1994; he was earlier Head of Department (2003–2010) and Chairman of the Swedish National Committee for Mathematics. In that capacity he led the Swedish delegation to the General Assembly of the International Mathematical Union in Bangalore, Karnataka, in 2010. At his death he was President of the Swedish Mathematical Society, Deputy Director of Institut Mittag-Leffler, a member of the Board of the International Science Programme, and a member of the Board for the Pan-African Centre for Mathematics.

He was a brilliant mathematician. His work on residue theory in several variables soon became widely appreciated. This is a classical but notoriously difficult branch of complex analysis. His work was inspired among others by that of the Argentinian mathematician Miguel E. M. Herrera, who died prematurely in 1984.

His latest work is on amoebas and coamoebas. The spines of amoebas are tropical hypersurfaces. Tropical mathematics is a rather new branch of mathematics, where addition and multiplication is replaced by the maximum operation and addition, somewhat like taking the logarithm of a sum and a product. His interest in tropical mathematics was a break with his work on complex analysis in several variables.

Mikael was the advisor of nine doctors, registered in the Mathematics Genealogy Project. They are: Yang Xing 1992, Mikael Forsberg 1998, Lars Filipsson 1999, Timur Sadykov 2002, Hans Rullgård 2003, Johan Andersson 2006, Alexey Shchuplev 2007, David Jacquet 2008, and Lisa Nilsson 2009.

Mikael was due to arrive in Tehran on September 17, at 21:25, and Siamak Yassemi, Head of the School of Mathematics, University of Tehran, would have been waiting for him there.

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Mikael's death is a huge loss to the Pan-African Centre for Mathematics, to the Department of Mathematics, Stockholm University, to the international community of mathematicians, but of course no words can describe the magnitude of this loss to his family and close friends.