

## IN MEMORIAM



PROF. DR. HARRY I. MILLER  
(1939 - 2018)

On December 17th, 2018, our dear professor, colleague and long time Editor-in-Chief of Sarajevo Journal of Mathematics, Prof. Harry I. Miller unexpectedly left us. Until his last day, Prof. Miller was full of life and energy, and in good spirits, finishing a manuscript and making final corrections on it.

Harry Miller was born on February 22 (George Washington's birthday, as he loved to point out), 1939 in Chicago. He grew up in Hyde Park, near the University of Chicago and often mentioned how the intellectual and cosmopolitan atmosphere of this neighborhood made a great impression on his young mind. His father Sol, the son of immigrant Jewish parents from Russia, a successful pharmacist with many cultural interests, also steered him along intellectual lines, and his mother Rose, a strong and energetic woman, taught him to work hard for his goals.

Dr. Miller received his Ph. D. at the Illinois Institute of Technology in June 1966. At I.I.T he developed his mathematical talents under world famous Karl Menger, his advisor J. Mehlberg and many other gifted mathematicians. It was there that he met his wife to be Naza Tanović in the fall of 1964 in a graduate course in Linear Operators in Hilbert Space. They

married on March 20, 1965 and their daughter Leila was born the following year. Naza got her Ph.D. in 1969.

That year Professor Miller decided to leave his position as assistant professor at De Paul University so that he could, along with Naza who rejected a job offer from NASA, pursue a different path. They arrived in Naza's hometown of Sarajevo in July of 1969, on a mission to build mathematics education and research at the Mathematics Department of the University of Sarajevo. Colleagues and students described their arrival as a breath of fresh air and a burst of energy that brought forth a great deal of development to Bosnian mathematics in the years to come. Together with colleagues they built a math department that became respected and shaped the paths of talented students, mentoring them and sending them abroad to continue their education. Among their students (and today professors of mathematics) were also their two daughters - Leila and Alica.

Harry Miller rose through the academic ranks becoming a full professor in 1979. In the process, he has written more than 90 scientific papers and delivered about 200 talks, on his work, at various seminars, conferences and colloquii at many mathematics departments. We mention that his papers have appeared in more than 30 different international journals. He has written 22 papers with 11 different students, all of whom are now Ph.D.'s in mathematics. He has delivered 35 invited talks at mathematics departments in the United States including talks at the universities of Michigan, Michigan State, Wisconsin, Kansas, Massachusetts, Ohio State, etc. Of his more than 90 papers, more than 40 are joint works, with more than 20 different co-authors from Greece, Turkey, Poland, USA, Austria, India, Pakistan, Croatia, BiH and Italy. In addition, he has taught at 12 different universities: Illinois Institute of Technology, University of Michigan, DePaul University, University of Tennessee at Chattanooga (where he was chair of the Mathematics Department from 1994-1998), Bilkent University (Ankara), University of Louisville, Mt. Holyoke College (Massachusetts), Ohio University, Bosphorus University (Istanbul), International University of Sarajevo, University of South Carolina - Beaufort, and University of Sarajevo. Of course he spent the most time and interacted the most, during his career, with the Mathematics Department of the Faculty of Natural Sciences and Mathematics of the University of Sarajevo.

His contributions to Real Analysis and Summability Theory are well known to experts in these fields. Several of his results have become classics in their fields. His article "*A measure theoretical subsequence characterization of statistical convergence*" that appeared in the Transactions of the AMS in 1995 was one of his most profound works, and is regularly cited in literature to the present day (257 citations according to Google Scholar). In

recent years two highly regarded London mathematicians have been citing what they call “Miller Homotopy” and “Miller’s Theorem”. The day before his death, Prof. Miller was making final corrections on a new manuscript with two colleagues, that is now submitted for publication.

Professor Miller often repeated that the single biggest influence on his career and his love for Bosnia came from his late wife Prof. Dr. Naza Tanović-Miller who died suddenly on November 15, 2001. Along with Naza he always devoted himself to his students and during and after the war of aggression on BiH (1992-1995) he spent vast amounts of time (with humanitarian work, political action and through the international media) and personal funds to aid BiH and its people to survive and hopefully to thrive. In 1985 he helped her found our journal, under its first name *Radovi Matematički*. After the war and pause in publishing, they made huge efforts toward the journal revival and further development as a respectable international publication, putting in tremendous work in a country impoverished by war, and succeeding. In 2002 after Naza’s death he became Editor-in-Chief of the Sarajevo Journal of Mathematics and successfully led the journal until retiring from that position in 2018. For his efforts on the advancement of mathematics and education in BiH, he was elected a foreign member of the Academy of Sciences and Arts of Bosnia and Herzegovina (ANUBiH) in September of 2008.

Harry Miller was a force of energy. His remarkable character, high spirits, enthusiasm, and endless devotion to mathematics, science, his students and his adopted homeland of Bosnia and Herzegovina, left a permanent mark on all of us. We remember his relentless optimism and humor and hope to carry on his legacy.

Leila and Alica Miller

