

BIOGRAPHY OF MALVINA BAICA



The wife of Adrian Baica and daughter of Adam (a lawyer) and Cornelia Bunghiu, Malvina Florica Baica was born in Oravita, Romania, on the 3rd of November 1942; After gaining her baccalaureate at *Oravita Lyceum* in 1960 she spent, five years at the *University of Timisoara*, earning a BS in Mathematics and Physics (mechanics) and an European MS in Mathematics (Projective and Differential Geometry). She taught for two years, but subsequently emigrated, with political asylum to the United States. Resuming her studies she was awarded her MA in Mathematics (Algebra and Number Theory) by *Illinois Institute of Technology of Chicago* in 1974 and her Ph.D. in Mathematics (Algebraic Number Theory and Algebra) by the *University of Houston*, Texas, in 1980. Her Ph.D. advisor was Jürgen Schmidt and her Ph.D. dissertation advisors were Helmut Hasse and Leon Bernstein.

Since 1992, Professor of Mathematics and Computer Science at the *University of Wisconsin – Whitewater*, Dr. Baica joined the academic staff there in 1984 as a lecturer, and was appointed assistant professor the following year. She had previously held positions as assistant professor at *Marquette University* (Wisconsin), *Marshall University* (West Virginia) and *Valparaiso University* (Indiana).

Her research results were published by reputable journals in more than 70 papers.

Among her publications the most significant are “*An Algorithm in a Complex Field (ACF) and its Applications to the Calculations of Units*” (which is a new and very powerful algorithm, which turned out to be the General Euclidean Algorithm) known as Baica’s General Euclidean Algorithm (BGEA); “*Trigonometric Identities*” (now known in mathematical literature as Baica’s Trigonometric Identities), where Gauss’ two trigonometric identities given by Gauss without proof become particular cases of Baica’s Trigonometric Identities proved true in general; “*Putting last Digits first yields Multiples*” (a joint paper with the late Helmut Hasse). Using her (BGEA) algorithm she proved all the famous open problems in algebraic number theory, including Fermat Last Theorem (FLT).

She has given professional talks at Conferences and other meetings including *the International Congress of Mathematicians*, held at the University of California, Berkeley, in 1986, *the International Conference of Number Theory* in Quebec, Canada, in 1987, *the American Mathematical Society’s Centennial Celebration* in Providence, Rhode Island, in 1988 and *the International Conferences on Analytical Number Theory* at the University of Illinois, Allerton Park, Urbana, also in 1988. After 1989 (Romanian Revolution) she returned to *Alma Mater* giving more conferences on her favorite subjects in Romania. As consequence she joined *Pannonian Applied Mathematical Meetings (PAMM)*, finding a favorable climate to meet prestigious European mathematicians and scientists for mathematical and interdisciplinary cooperation.

She had received a distinguished professional leadership award and is included in the “*International Directory of Distinguished Leadership*”, third edition. Also, she is included in “*Who is Who*” *International* and in “*Who is Who*” *for Women*.