
PREFACE TO VOL. 16 ISSUE 1: SPECIAL ISSUE IN MEMORY OF PROFESSOR BEN FINE

Brief word about the Special Issue. This issue of the journal of Groups, Complexity, Cryptology is dedicated to the life, work and memory of Professor Ben Fine, who sadly passed away in March 2023. Ben was one of the founding editors of the journal, and a great contributor and colleague to many in the field.

The special issue has been guest edited by Alexei Miasnikov and Vladimir Shpilrain, with contributions from Pavel Gvozdevsky, Vladimir Shpilrain, Alexander Ushakov, Ivan Buchinskiy, Matvei Kotov, Alexander Treier, Martin Kreuzer, Florian Walsh, Bob Gilman, Alexei Miasnikov, as well as a paper by Ben himself with Gerhard Rosenberger and Leonard Wienke.

Memory of Ben Fine, by Gerhard Rosenberger. Ben Fine received his Ph.D. in Mathematics from Courant Institute, New York University, in 1973, under the supervision of Wilhelm Magnus. His dissertation involved the group-theoretical structure of number theoretically defined matrix groups, such as the modular group and the Bianchi groups. He was especially interested in the amalgam structure of these groups. At that time I worked with automorphic forms with rational periodic functions and theta functions for Hecke groups and Dirichlet series with functional equations. While these topics are purely number theoretical, they involved many group theoretical questions.

I met Ben the first time 1983 in New York where he asked me about my paper with Norman Purzitsky on two-generator Fuchsian groups and my paper on certain 3-free, one-relator groups. From that time onwards we kept in touch. Our deep collaboration began in 1985, and we have been working together ever since. Over the years, many other people were involved in this study: Gilbert Baumslag, Laura Ciobanu, Anthony Gaglione, Volkmar große Rebel, Jim Howie, Delaram Kahrobaei, Martin Kreuzer, Frank Levin, Colin Maclachlan, Alexei Miasnikov, Anja Moldenhauer, Marjatta Näätänen, Dennis Spellman, Michael Stille, Rick Thomas, and Leonard Wienke, to mention a few. Between 1985 and 2023 we together wrote 16 textbooks and about 100 papers on group-theoretical, number-theoretical, complex-analytical, and topological problems. Our book ‘The Fundamental Theorem of Algebra’ for Springer-Verlag was translated into several languages including Japanese, and won the Alpha Sigma Nu Book Award in Science in 2001.

Almost every year, Ben came to visit me in Dortmund or Hamburg to work with me and my students. He was very serious and helpful with their mathematical problems. He acted as a supervisor for eight of my Ph.D. students in Dortmund. The students liked Ben not only because of the mathematical discussions, but for all his wonderful stories — Ben was the best storyteller I met, and my best friend ever.