

Contagious Creativity

This special issue honors the 80 birthday of Professor Solomon Marcus – an outstanding and unique scientist.

Professor Marcus is an enormously prolific writer – one of the most cited Romanian mathematicians: he has authored or co-authored about 50 books (!), and written about 400 papers (even though he is 80 years old the precise count changes monthly!). He is a founder/pioneer/initiator of very many research topics/areas such as mathematical poetics, mathematical theory of theater, analytical formal language theory, contextual grammars, semiotics, and many more. His book “Finite Grammars and Automata” (in Romanian) was one of the first books on formal languages and automata theory. Also, already in the early seventies he was writing on the use of formal languages for the study of the structure and function of DNA – in this way he is one of the pioneers of molecular computing.

The scope of his research is enormously broad – the topics range from classic to very modern, and it is also very interdisciplinary. He begun his research career in mathematical analysis (writing more than 100 papers within 10 years), and then added mathematical language theory as another major stream of his research output. He has an amazing ability of establishing interesting bridges/relationships between seemingly very different areas of knowledge.

Professor Marcus is also a remarkable person that fits very well into the profile of “an old style Professor”, i.e., a serious scientist with enormously broad encyclopedic knowledge, amazing curiosity, and perfect memory – also his favorite lecturing medium is still the blackboard! He is a very stimulating (“contagious”) researcher and a uniquely inspiring teacher – this has a very invigorating effect on his audiences, which are continuously expanding through his lectures given at (hundreds of) universities and conferences all over the world.

It is in the recognition of all these qualities combined in one scientist with inexhaustible enthusiasm and energy for research, that he is refereed to as “Professor El Infinito”. We feel very privileged to have this opportunity to edit this special issue which, in spite of its unusually big size, covers only an epsilon of the enormous area of his interest and creativity.

Dear Professor Marcus:

Also on behalf of all the contributors to this special issue, please accept our best wishes for many interesting, creative and healthy years to come.

The Editors: C. Calude, Gh. Păun, G. Rozenberg