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Sommario/riassunto

Gheorghe Pun has played an important role within a wide range of disciplines, from the foundations of traditional computation theory and formal language theory to research gaining its inspiration from living nature. He has significantly contributed to the development of these diverse fields, initiating and pioneering some of them with remarkable imaginativeness and enthusiasm. Gheorghe Pun's research focusses on systems inspired by structures and processes found in living systems, with the field of membrane computing or P systems being the most important of his initiatives. This Festschrift volume, published to honor Gheorghe Pun on the occasion of his 60th birthday, includes 16 contributions by his students and collaborators. The research presented aims to gain a better understanding of what computation is, to find better models of computation, and to look for new computing devices inspired by the structure and/or functioning of natural or societal systems. The papers are preceded by an introduction by Solomon Marcus, Gheorghe Pun's lifelong teacher and mentor, and are organized in topical sections on general computing, grammar systems, membrane systems, and inspirations from natural computing.