FISEVIER

Contents lists available at ScienceDirect

International Journal of Non-Linear Mechanics

journal homepage: www.elsevier.com/locate/nlm



Preface



This Special Issue of IJNM, *A Phenomenological Conspectus on Nonlinear Dynamics*, emphasizes the notion that various and different physical phenomena can often be described by identical or similar mathematical instruments. In this regard, papers from disparate fields have been compiled in the issue.

It is noted that the concepts of Mathematical Phenomenology and Phenomenological Mappings are captured in the works of Professor Mihailo Petrović (1868–1943), a Serbian mathematician who was one of the doctoral students of Jules Henri Poincare (1854–1912). The specific title of his book in French is *Mecanismes communs aux phénomènes disparates*, Paris 1921. In this book, Petrović studied (among others) certain elements of multidimensional geometry, couplings between mechanisms and manifestations of phenomena, quantitative vis-à-vis qualitative images of appearances (phenomena), as well as different kinds of analogies.

It is hoped that this Special Issue comprising papers of different thematic foci will serve to highlight the role of a "phenomenological" perspective for pedagogical and investigative purposes in the field of nonlinear dynamics in physically disparate systems. Professor, Special Issue Managing Guest Editor Katica R. (Stevanović) Hedrih Mathematical Institute (SANU) – Belgrade, Serbia

Professor, Special Issue Co-Editor Ivan Kosenko Technical University of Radio Techniques – Moscow, Russia

> Professor, Special Issue Co-Editor Pavel Krasilnikov Moscow Aviation Institute – Moscow, Russia

> > Professor, Editor-in-Chief Pol D. Spanos Rice University – Houston, USA