## *THE FIRST EDITION (2013)*

For the first Edition of the **"Dimitrie Pompeiu"** Prize, the Editorial Board received around twenty eligible proposals. The following seven papers (listed in the publication order) were selected for the final evaluation process:

CONTROL OF DETERMINISTIC AND STOCHASTIC SYSTEMS WITH SEVERAL SMALL PARAMETERS - A SURVEY by Hiroaki Mukaidani and Vasile Dragan (Vol.1, no.1, 2009)

VIABILITY FOR MULTI-VALUED SEMILINEAR REACTION-DIFFUSION SYSTEMS by Monica Burlica (Vol.2, no.1, 2010)

OPTIMAL CONTROL OF A NONLINEAR COUPLED ELECTRO-MAGNETIC INDUCTION HEATING SYSTEM WITH POINTWISE STATE CONSTRAINTS by Irwin Yousept (Vol.2, no.1, 2010)

ROBUST STABILITY AND ROBUST STABILIZATION OF DISCRETE TIME LINEAR STOCHASTIC SYSTEMS by Vasile Dragan and Toader Morozan (Vol.2, no.2, 2010)

SUFFICIENT OPTIMALITY CONDITIONS FOR THE MOREAU-YOSIDA TYPE REGULARIZATION CONCEPT APPLIED TO SEMILINEAR ELLIPTIC OPTIMAL CONTROL PROBLEMS WITH POINTWISE STATE CONSTRAINTS by Klaus Krumbiegel, Ira Neitzel and Arnd Rösch (Vol.2, no.2, 2010)

THE CLASSICAL MAXIMUM PRINCIPLE. SOME OF ITS EXTENSIONS AND APPLICATIONS by Cristian-Paul Danet (Vol.3, no.2, 2011)

TWO OPTIMAL CONTROL PROBLEMS IN CANCER CHEMOTHERAPY WITH DRUG RESISTANCE by Werner Krabs and Lothar von Wolfersdorf (Vol.3, no.2, 2011)

An international Comission of specialists has examined the papers and has decided to attribute the first **„Dimitrie Pompeiu"** Prize, consisting in 1000 Euro and a Certificate, to the paper authored by Irwin Yousept. Moreover, it was decided to offer a **Special Award,** consisting in a Certificate, to the papers authored by Monica Burlica, respectively by Vasile Dragan and Hiroaki Mukaidani, classified in the second position, aequo loco.

The Commission noted that Prof. Yousept is a young and very promising researcher. The paper is devoted to the difficult subject of optimal control of partial differential equations, the case with state constraints. The model is the stationary induction heating, involving a nonlinear coupling between the heat equation and the electromagnetic one. This leads to a delicate existence study for the state equation and the final result is a first-order optimality system. The paper has an interdisciplinary character and the employed arguments have a high degree of complexity.

In his answer, Prof. Yousept said: I would like to express my sincere thanks to the Editorial Board and the international Commission. It is really a great honor for me to receive the „Dimitrie Pompeiu" prize from the Academy of Romanian Scientists, Bucharest.

The Editorial Board