

## ANALYSIS OF THE BEHAVIOR OF DYNAMIC RISKS TECHNICAL SYSTEMS

NIKOLAY PETROV<sup>1</sup>, KRASIMIR YORDZHEV<sup>2</sup> AND STANCHO PAVLOV<sup>3</sup>

<sup>1</sup> EPF-Sliven, Technical University, Sofia, Bulgaria

E-mail: nikipetrov\_1953@abv.bg

<sup>2</sup> Faculty of Mathematics and Natural Sciences,  
South-West University, Blagoevgrad, Bulgaria

E-mail: yordzhev@swu.bg

<sup>3</sup> Asen Zlatarov University, Burgas, Bulgaria

E-mail: stancho\_pavlov@yahoo.com

### Abstract

The report shows the applicability of the theory of bifurcation for analyzing the behavior of dynamic risk technical systems after modification of their parameters. The present paper demonstrates that the applied approach is very suitable for analysing the behaviour of dynamic risk technical systems following modifications of their parameters.

---

Key Words : *Dynamic technical system, Risk, Bifurcation, Taylor series.*

2000 AMS Subject Classification : 41A58, 97M50.

© <http://www.ascent-journals.com>