## MULTI-CRITERIA MODELS IN AUTONOMOUS DECISION MAKING SYSTEMS

Karel Mls\* Faculty of Informatics and Management University of Hradec Kralove Hradec Kralove, Czech Republic E-mail: <u>karel.mls@uhk.cz</u>

Martin Gavalec Faculty of Informatics and Management University of Hradec Kralove Hradec Kralove, Czech Republic E-mail: <u>martin.gavalec@uhk.cz</u>

## ABSTRACT

Decision making processes, based on various multi-criteria models are considered. The main differences between AHP (Analytic Hierarchy Process), ANP (Analytic Network Process) and CHP (Cognitive Hierarchy process) methods will be discussed. The possible use of referred methods for decision support in autonomous systems will be proposed and strong and week points of the methods will be experimentally demonstrated on on-line decisional problem.

Keywords: AHP, ANP, CHP, autonomous system, on-line decision making

<sup>\*</sup> The support of Czech Science Foundation # 402/09/0405 is kindly acknowledged