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RESEARCHES ON PETRI NETS FOR FLEXIBLE ROBOTIZED STRUCTURES MODELING

BY

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Abstract. Flexible Robotized Structures are dynamic systems integrating explicitly and simultaneously continuous systems and discrete event systems, which require for their description, the use of continuous time model, discrete event model and the interface between them. Hence, this paper is focused to a Hybrid Petri Nets approach for modeling flexible robotized structures as hybrid systems. It shows why hybrid modeling is useful for the design process instead of the currently preferred view based on discrete events, and, finally, a case study is presented.

Keywords: Robotized Structures, Petri Nets, Hybrid Model, Performance Evaluation.