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COMPARAISON OF HEURISTIC AND HYBRID HEURISTIC FOR THE SOLUTION OF LINEAR MODEL BASED PREDICTIVE CONTROL

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Abstract : In this work, we compare the application of simple meta heuristics and hybrid for the on line optimal solution of the linear MPC. For these purpose, we consider two meta heuristics: particles swarm optimization, PSO, and gravitational search algorithm, GSA and a hybrid algorithm, PSO-GSA. Two linear systems are considered, a monovvariable and multivariable system.

Keywords : predictive control, heuristics, optimization