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Abstracts of Short Communications and Posters

Section:

17. Control Theory and Optimization

1991 MS Classification: 93
Petrović, Ljiljana, University of Belgrade, Yugoslavia
Causality and Markovian Representations
We consider a problem (that follows directly from realization problem): find all minimal Markovian representations (as states of stochastic dynamic system S_1 with known outputs) for a given family of Hilbert spaces such that each of these two families provides exactly the same amount of information about some other family of Hilbert spaces (i. e. about some another stochastic dynamic system S_2). Some results of this exposition will appear in: Petrović, Lj. (1998), Causality and Markovian Reductions and Extensions of a Family of Hilbert Spaces, *Journal of Mathematical Systems, Estimation and Control (JMSEC).*