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Global Robust Dissipativity of Neural Networks with Variable and Unbounded Delays

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Abstract: In this paper, the global robust dissipativity of a class of neural networks with variable and unbounded delays is investigated. Several criteria are obtained by constructing radically unbounded and positive definite Lyapunov functionals and using analytic techniques. Some numerical examples are given to compare our results with previous robust dissipativity results derived in the literature. It is shown that our results extend and improve earlier ones.

Keywords: dissipativity; neural networks; attractive set; integro-differential models.

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