

# SIMULATION OF DYNAMIC PROCESSES IN NONLINEAR DISCRETE SYSTEMS WITH DELAY ON THE BASIS OF GRAPHS

Introduction. Currently, an exceptionally digital technique is used to manage automatic systems of various nature and various purposes. Measurements and control are carried out in discrete times, therefore discrete mathematical models of dynamic systems are relevant. Initially, systems with pulse-frequency modulation were widely used in radio engineering and telemetry [1]. At present, pulse-frequency systems are widely used in information and measurement technology [2,3,4], in automatic control systems [5,6,7], in modulating installations [8] and in the study of nervous activity [9,10]. Pulse-frequency systems belong to the class of essentially nonlinear systems, since there is a nonlinear element in their structure.

[Full text](#)