

PROGNOSTIC MODELING IN ECOLOGY AND INFORMATION TECHNOLOGIES

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Abstract. The environmental problem remains the most serious obstacle on a way of development of a civilization. Its solving substantially depends on adequacy of forecasts of an ecological situation not only on regional, but also on a global scale. Modern information technologies open ample opportunities for its studying by means of computer modeling. However, there are many methodological problems in this process of scientific research of global trends in ecological development. They are discussed in this paper. A break between the system of methodological synergetic principles and an opportunity of their realization in concrete systems of modeling is marked.

Keywords: ecology, prognosis, modeling, information technology, nonlinearity, synergetic, nonlinear dynamics.