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**MODELING THE DYNAMICS OF THE PREDATOR-PREY COMMUNITY BASED ON THE AGE STRUCTURE OF THE INTERACTING SPECIES**

We propose the prey-predator model, in which each species age structure is represented by two stages of development, as well as pronounced seasonality of the life cycle. The situation typical for the natural community of arctic fox and mouse-like rodents is modelled. Dynamic modes of the proposed model have been investigated as well as the possibility of the dynamic mode change.

**Keywords:** mathematical model, dynamic modes, community, predator-prey model, stability, age structure.

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