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Dynamics of fish populations in Lake Tanganyika	
<p>This is a joint work with Professors László Hatvani and László L. Stachó. We investigate a population dynamical model initiated by László Stachó. This model describes the change of the amount of two fish species - a carnivore and a herbivore - living in Lake Tanganyika. The model consists of two parts: the development of the population during a year is described by a non-autonomous system of differential equations while the reproduction at the end of each year is described by a discrete dynamical system. We showed that the equilibrium of the limit equation of our system is a globally eventually uniform-asymptotically stable point of the non-autonomous system. In the proof we use linearization, the method of limit equations and Lyapunov's direct method. We also show some results about the behaviour of the whole system with the discrete part of the reproduction and about a slightly modified system where the growth of the vegetation left on its own would be exponential.</p>	