

## **Positive equilibrium solutions in some nonlinear age-structured population models**

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The talk focuses on positive equilibrium solutions to abstract nonlinear population models with age dependence and diffusion. Introducing a parameter measuring the intensity of the fertility, local and global bifurcation from the trivial solution is shown. The results are applied to derive a characterization of the coexistence steady states for an age-structured diffusive predator-prey-model.