On Renewal Equations in Population Biology

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The first aim of this talk is to show, by way of examples, how ubiquitous Renewal Equations are in the mathematical formulation of models in Population Dynamics and Infectious Disease Epidemiology.

The second aim is to advocate viewing Renewal Equations as Delay Equations, on par with Delay Differential Equations.

A third aim is to draw attention to a class of numerical methods that allow to use standard ODE tools for a numerical bifurcation analysis.

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