
NONAUTONOMOUS SOLUTION BIFURCATION: OLD AND NEW!

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A bifurcation theory for nonautonomous ordinary differential equations is a challenging endeavor because typically such equations neither possess constant solutions, nor do eigenvalues serve as stability indicator. For this reason, nonhyperbolicity as a necessary condition for bifurcation is understood as a lack of an exponential dichotomy. One possibility to create such a nonhyperbolic situation is to merge equations being hyperbolic on the positive and negative semi axis individually. Based on this assumption, we discuss several sufficient criteria for the bifurcation of bounded entire solutions.

The “New!” part of this talk is joint work with Robert Skiba (Toruń).

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