GERGELEY RÖST, York University, Toronto / Univ. Szeged, Hungary Bifurcation of periodic delay differential equations

We study the bifurcation of time-periodic scalar delay differential equations, depending on a parameter. The complete bifurcation analysis is performed explicitly, using Floquet-multipliers, spectral projection and center manifold reduction. The case of strong resonance is also discussed. Numerous examples are given to illustrate our theorems: subcritical and supercritical bifurcations into invariant tori can be observed for many notable equations.