

# Travelling Waves (TWs) in Lattice Differential Equations (LDEs)

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LDEs are differential-difference equations defined by a system of ODEs coordinatized by a lattice. There is extensive theory and computation of TW solutions of parabolic type PDEs, but little beyond existence is known about TW solutions of spatially discrete analogues. Finding TW solutions of LDEs requires the solution of functional differential equation BVPs with both advanced and retarded terms. We will discuss some of the issues involved in accurate numerical computation of these solutions using collocation methods. We will also present numerically computed TW solutions for several problems including Nagumo-type problems on uniform and non-uniform lattices.