Methods of Solution of Second Order Linear Equations on Time Scales

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A time scale, $\mathbb{T}$, is a nonempty, closed subset of the real numbers, $\mathbb{R}$. Several methods of solution exist for second order linear equations on a time scale. An advantage of these methods is that we can obtain solutions on a system comprising of continuous and/or discrete elements. After restricting the time scale to be $\mathbb{R}$, these solutions are equivalent to those obtained using differential equations methods.