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### **Timelike Salkowski curves in Minkowski space E31**

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#### **Abstract**

One century ago, Salkowski introduced a family of curves with constant curvature but non-constant torsion (Salkowski curves) and a family of curves with constant torsion but non-constant curvature (anti-Salkowski curves) in Euclidean 3- space E3 [14]. In this paper, we adapt the definition of such curves to timelike curves in Minkowski 3-space E31. Thereafter, we introduce an explicit parametrization of a timelike Salkowski curve and a timelike anti-Salkowski curve in Minkowski space E31. Also, we characterize them as space curves with constant curvature or constant torsion and whose normal vector makes a constant angle with a fixed line. © 2010 Institute of Advanced Scientific Research.

#### **Author Keywords**

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