1077-39-788 **Lynn Erbe**, **Raziye Mert** and **Allan Peterson*** (`apeterson1@math.unl.edu`), Math Dept, 237 Avery, University of Nebraska-Lincoln, Lincoln, NE 685880130. *Spectral parameter power series for Sturm-Liouville problems on time scales.* Preliminary report.

We will derive formulas for finding two linearly independent solutions of the Sturm-Liouville dynamic equation. We will give several examples. In particular the q-difference equation which has important applications in quantum theory will be presented. (Received September 12, 2011)