

Meeting: 1001, Evanston, Illinois, SS 16A, Special Session on Spectral Problems of Differential Operators

1001-47-216 **Hans W Volkmer*** (volkmer@uwm.edu), Dept of Math. Sciences, P.O. Box 413, University of Wisconsin-Milwaukee, Milwaukee, WI 53201. *Comparison of eigenvalue problems due to Krein, Feller and Atkinson.*

Krein and Feller developed a theory of Sturm-Liouville problems involving measures. Independently, Atkinson introduced his semi-definite eigenvalue problems. It is shown that the eigenvalue problems of Krein and Feller can be transformed to those considered by Atkinson. As a consequence, new results are derived for measure Sturm-Liouville problems and a new unified theory is obtained. (Received August 26, 2004)