1106-41-2813   **Velinda R. Calvert*** (`vc1@msstate.edu`), **Somayeh Mashayekhi** and **Moshen Razzaghi**.
Solution of Lane-Emden type equations using Rational Bernoulli functions.

In this talk, a numerical method for solving Lane-Emden type equations is presented. The method is based upon using rational Bernoulli functions to approximate the solution. The properties of the rational Bernoulli functions are presented. Some examples are given to demonstrate the efficiency and accuracy of the proposed method. (Received September 16, 2014)