

1135-34-207

**Bhuvanewari Sambandham\*** ([buna.sambandham@dixie.edu](mailto:buna.sambandham@dixie.edu)), Dixie State University, Saint George, UT 84770, and **Aghalaya S Vatsala** and **Vinodh Kumar Chellamuthu**. *Numerical results for Linear Sequential Caputo Fractional Boundary Value problem with mixed boundary conditions*. Preliminary report.

In our earlier work, we have developed the generalized monotone iterative technique for sequential Caputo fractional boundary value problems with mixed boundary conditions. As a byproduct, we have obtained a representation form for the linear nonhomogeneous sequential Caputo fractional boundary value problem in terms of the Green's function. In this work, we have developed the numerical simulations for a linear nonhomogeneous sequential Caputo fractional boundary value problem with mixed boundary conditions. This in turn, will be used as a tool to develop the numerical results for the nonlinear sequential Caputo fractional boundary value problem via generalized monotone iterative technique. (Received August 11, 2017)