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Aghalaya S. Vatsala* (vatsala@louisiana.edu), Department of Mathematics, University of Louisiana at Lafayette, Lafayette, LA 70504, and **Yunxiang Bai**. *Fractional Impulsive Differential Equations and Comparison Results*. Preliminary report.

In this work, we have considered fractional impulsive differential equation with initial conditions and the impulses are introduced as non-homogeneous terms. Using Laplace transform method we have obtained a closed form of the solution for the linear impulsive differential equation. This will enable us to prove the uniqueness of the solution of the linear fractional impulsive differential equation. We have developed a comparison result relative to coupled lower and upper solutions of the nonlinear fractional impulsive differential equations with initial conditions. We also present some numerical results. (Received September 21, 2017)