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**Florentina Tone\*** ([ftone@uwf.edu](mailto:ftone@uwf.edu)), Department Mathematics and Statistics, University of West Florida, Pensacola, FL 32514, and **Theodore Tachim Medjo** ([tachimt@fiu.edu](mailto:tachimt@fiu.edu)), Department of Mathematics and Statistics, Florida International University, Miami, FL. *Long time stability of the implicit Euler scheme for an incompressible two-phase flow model.*

In this talk we present results on the stability for all positive time of the fully implicit Euler scheme for an incompressible two-phase flow model. More precisely, we consider the time discretisation scheme and with the aid of the discrete Gronwall lemma and of the discrete uniform Gronwall lemma we prove that the numerical scheme is stable. (Received August 09, 2013)