

**Meeting:** 1003, Atlanta, Georgia, AMS CP 1, AMS Contributed Paper Session

1003-65-1187      **Ahmed I Zayed\*** (azayed@math.depaul.edu), Department of Mathematical Sciences, DePaul University, Chicago, IL 60614, **Elias Deeba**, Department of Math, University of Houston-Downtown, Houston, TX 77002, and **Jeong-Mi Yoon** (yoonj@uhd.edu), Department of Mathematics, University of Houston-Downtown, Houston, TX 77002. *A comparison between the Adomian decomposition and the sinc-Galerkin methods.*

We present a modified Adomian decomposition method for solving nonhomogeneous heat equations and nonlinear boundary-value problems. We then compare the results with those obtained by using the wavelet-Galerkin and sinc-Galerkin methods. (Received October 04, 2004)