1077-33-81   **Mohamed T Boudjelkha*** (`boudjm@rpi.edu`), Mathematical Sciences Department, Amos Eaton # 404, Rensselaer Polytechnic Institute, Troy, NY 12180. *On the Approximation of the Lower Generalized Incomplete Gamma Function,Arising in Heat Conduction Problems.*

In this paper we consider the Lower Generalized Incomplete Gamma Function. Properties, approximations and applications are discussed. Closed form expressions are also obtained. (Received July 20, 2011)