

1135-35-1090

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Narayan Thapa (nthapa@cameron.edu), 2800 West Gore Blvd, Lawton, OK 73505. *Time
Dependent Parameter Identification Problem in Parabolic Partial Differential Equation Through
Over-Specification of Data*. Preliminary report.

Coefficients and source identification problems in parabolic type of partial differential equations have received notable attention in several fields such as quantum mechanics, finance, chemical diffusion, and fluid dynamics recently. In this presentation, we discuss on time dependent parameter $a(t)$ associated with parabolic type of partial differential equation. Over-specification of data $u(x^*, t) = H(t)$, $0 \leq t \leq T$, initial and boundary data are used to estimate the parameter. A number of numerical examples will be presented to validate the proposed computational method. (Received September 19, 2017)