1163-35-1061 Allaberen Ashyralyev and Abdullah S. Erdogan* (aserdogan@gmail.com), Palm Beach State College, Palm Beach Gardens, FL 33410, and M. Zuhair Nashed. Investigation of regularization methods for a source identification problem in the heat equation using operator approach.

In this talk, an inverse problem for identifying a space-dependent heat source in a multidimensional heat equation is considered. Simplified version of the Tikhonov regularization method and modified version of the Lavrentiev regularization method are proposed and studied by the operator theory approach. The theoretical results are supported by an example. (Received September 14, 2020)