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**Sergei Avdonin\*** ([s.avdonin@alaska.edu](mailto:s.avdonin@alaska.edu)), Department of Mathematics and Statistics,  
Fairbanks, AK 99775-6660. *Source Identification for the Wave Equation on Graphs.*

In this talk we consider source identification problems for the wave equation on trees and graphs with cycles. The main advantage of our approach is its locality: to recover unknown coefficients on a part of the graph we use an information relevant only to this subgraph. This feature of our method allows us to propose a very efficient identification algorithm which is new even for an interval and much more simple than known algorithms.

The talk is based on joint work with Serge Nicaise. (Received January 25, 2014)