1023-44-699   **Gaik Ambartsoumian*** (`gambarts@uta.edu`), Department of Mathematics, University of Texas at Arlington, P.O. Box 19408, Arlington, TX 76019-0408. *On reconstruction in limited view tomography.* Preliminary report.

In many tomographic applications the signals cannot be collected from all directions and only partial scan data is available. It is well known that despite the fact that theoretically a small piece of scanning arc should suffice to reconstruct the image, in practical implementations one can expect to recover stably only certain parts of the image, the rest of it being blurred out. The talk discusses the possibility of incorporating some a priori constraints on the unknown function to improve the recontsruction. (Received September 20, 2006)