Gaik Ambartsoumian* (gambarts@uta.edu), Department of Mathematics, University of Texas at Arlington, Arlington, TX 76017. On limited view tomography with side constraints. Preliminary report.

It is known that in the limited view problems of tomography certain singularities of the image can not be stably reconstructed regardless of the methods used. However, the situation may be improved by incorporating some a priori information about the image. The report will discuss some preliminary results about using certain side constraints about the image to stabilize the reconstruction. (Received January 29, 2008)