Indranil SenGupta\* (indranil.sengupta@ndsu.edu), Department of Mathematics, NDSU Dept # 2750, Minard Hall 408E12, Fargo, ND 58108-6050. Radial concentration problem using Radon transform. Preliminary report.

The concentration problem of maximizing signal strength of bandlimited and timelimited nature is important in communication theory. In this presentation we consider a different type of concentration problem for the bandlimited signals in a particular direction. This types of problem has applications in geophysics. Basic theoretical properties and numerical algorithms for solution and convergence theorems will be proved. (Received January 10, 2014)