1106-42-2228 **Rim Gouia-Zarrad*** (rgouia@aus.edu), Department of Mathematics and Statistics, American University of Sharjah, United Arab Emirates. *Reconstructing a function from its conical Radon transform.*

In recent years, Radon type transforms that integrate functions along families of curves or surfaces, have been intensively studied due to their applications to inverse scattering, synthetic aperture radar, imaging science, nuclear industry, etc. In this presentation, we consider the transform that integrates a function f over a family of cones invariant to translation. A new exact inversion formula is presented in the case of fixed opening angle and vertical central axis. In addition, the results of numerical simulations are presented to demonstrate the efficiency of the suggested algorithm in 2D. (Received September 16, 2014)