1108-44-174 Fatma Terzioglu* (fatma@math.tamu.edu). An Inversion Formula for the Cone Transform. Compton cameras arise in medical imaging, astronomy, and lately in homeland security applications. It naturally leads to a variety of Radon type transforms where integration is done over conical surfaces. In this talk, we present integral relations between cone and Radon transforms in \mathbb{R}^n , and give filtered back-projection type inversion formulas for the overdetermined cone transform. (Received January 10, 2015)