1163-65-797 **Taufiquar R Khan*** (`taufiquar.khan@uncc.edu`), Department of Mathematics and Statistics, University of North Carolina at Charlotte, Fretwell 360E, 9201 University City Blvd., Charlotte, NC 28223, **Vincent Barra**, University of Clermont-Auvergne, Clermont-Ferrand, France, and **Shyla Kupis**. *Deep Neural Networks for Image Reconstruction in Electrical Impedance Tomography.*

We will present deep learning algorithm for image reconstruction in electrical impedance tomography. We also compare the results from the machine learning approach to the deterministic approach using Gauss Newton method. (Received September 12, 2020)