

Abstract Submitted
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Testing of Unfolding Algorithm Using Blind Data EMY RIVERA, University of Puerto Rico Mayaguez, NATALIE MILKE, Technische Universität Dortmund — The RooUnfold package currently has available several different algorithms for the numerical solution of inverse problems or unfolding. Time-dependent Regularized Unfolding for Economics and Engineering, also known as TRUEE is an algorithm used to unfold and with time will be integrated to the RooUnfold package. Tests using simulated data in TRUEE were made with the goal to let future users know which parameters are ideal for their data. To test the TRUEE algorithm we used simulated data, with a known distribution and two different resolutions. The number of degrees of freedom and knots were found for different bin sizes. Chi square was then used to compare the unfolded and real distribution. The bin sizes with the smallest chi square were then used to unfold the blind data along with its parameters. Smaller bin sizes were used as well and then re-binned to see if the distributions matched. These re-binned distributions matched the unfolded distribution but did not match the known distribution.

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