The CMS collaboration has presented a study at 18.4 fb⁻¹ (8 TeV) of the kinematic fit probability. The graph shows the distribution of events with the corresponding data points, signal, QCD, and MC uncertainty shaded areas. The kinematic fit probability is plotted on the x-axis, while the number of events per 0.01 bin is shown on the y-axis. The data points are indicated by black circles with error bars, and the signal, QCD, and MC uncertainty are represented by the shaded areas in pink, gray, and light gray, respectively. The lower graph illustrates the ratio of data to the sum of signal and background, with Data/(S+B)⁻¹ plotted against the kinematic fit probability.