

(a) Fixed BW KDE performs slightly better than our WDE on this bimodal density.

(b) The WDE captures the middle peak of this trimodal density. The fixed BW KDE misses it.

(c) Fixed BW KDE under estimates peaks of this separated bimodal density.

(d) Variable BW KDE has lower ISE than fixed BW KDE in (c) but incorrectly gives several peaks.

(e) WDE captures the main peak area of this kurtotic density, fixed BW KDE fails. (Zoomed around peak.)

(f) Variable BW KDE also fails on kurtotic density estimating several peaks. (Zoomed around peak.)

(g) The WDE captures all peaks of this claw density while the variable BW KDE over shoots peaks 1, 3 and 4.

(h) The fixed BW KDE has a lower ISE than WDE on this double claw density but it misses all the sharp peaks.

Figure 3-1. 1D Density estimation comparison: WDE versus KDE. True analytic density is solid line, WDE is dashed line and KDE is dotted line. See Table 3-1 for WDE estimation parameters.