



Figure 1. Visualizing the data generated by equation 1. The first row is a coordinate plot: y against x_1 (in x -axis) and x_2 (in z -axis). The second row is the most informative plot: y against $\beta'_1 x$ (in x -axis) and $\beta'_2 x$ (in z -axis). The third row is the plot generated by SIR. By rotating the SIR plot, one can recover the saddle-like surface as sharply as the most informative plot. In contrast, any coordinate plot is too shadowy to reveal nonlinearity.