

LINEAR SMOOTHERS FOR CREDIT SCORING

A BASIS OF LINEAR SMOOTHERS

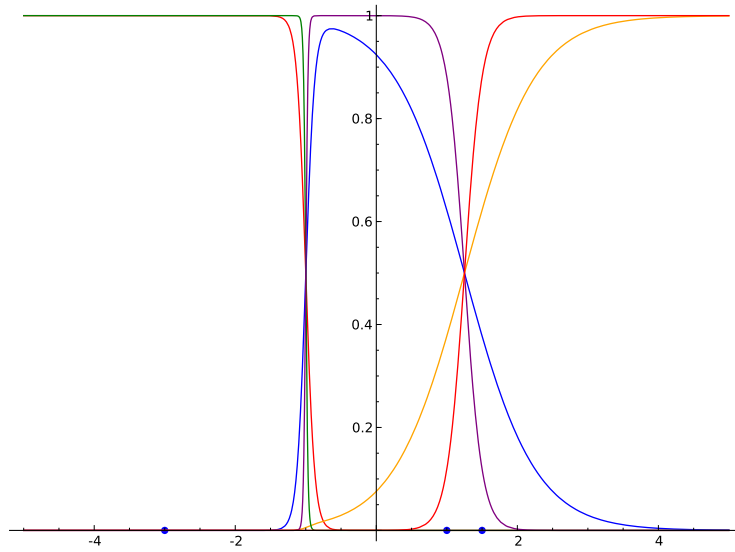


FIGURE 1. Linear smoothing basis functions on three points, bandwidth of $\frac{1}{2}$.

```
f=lfunctions(1/2)[1].simplify()
```

This is the function
$$\frac{\sqrt{2}e^{-2(x-1)^2}}{\left(\frac{\sqrt{2}e^{-2(x-1)^2}}{\sqrt{\pi}} + \frac{\sqrt{2}e^{-2(x+3)^2}}{\sqrt{\pi}} + \frac{\sqrt{2}e^{-\frac{1}{2}(2x-3.0)^2}}{\sqrt{\pi}}\right)}\sqrt{\pi}.$$