## June 1, 2016

```
In [2]: import numpy as np
        import matplotlib.pyplot as plt
        % matplotlib inline
In [3]: def Finv(x, mu, b):
            return mu - b * np.sign(x - .5)*np.log(1 - 2*np.absolute(x - .5))
        def Fpdf(x, mu, b):
            return 1/(2*b)*np.exp(-np.absolute(x-mu)/b)
In [15]: samples = Finv(np.random.random(500), 1, 2)
         numbins = 30
         plt.hist(samples, numbins)
         xs = np.linspace(-10, 10, 100)
         plt.plot(xs, Fpdf(xs, 1, 2)*((26*len(samples))/numbins), color="firebrick", linewidth=3)
         plt.show()
          120
          100
           80
           60
           40
           20
            0 -10
                                                                   15
                                                        10
                                                                               20
```

## In []: