

# Stable Distribution

The typical example of a stable distribution.

In[ ]:= **? StableDistribution**

Out[ ]:=

Symbol i

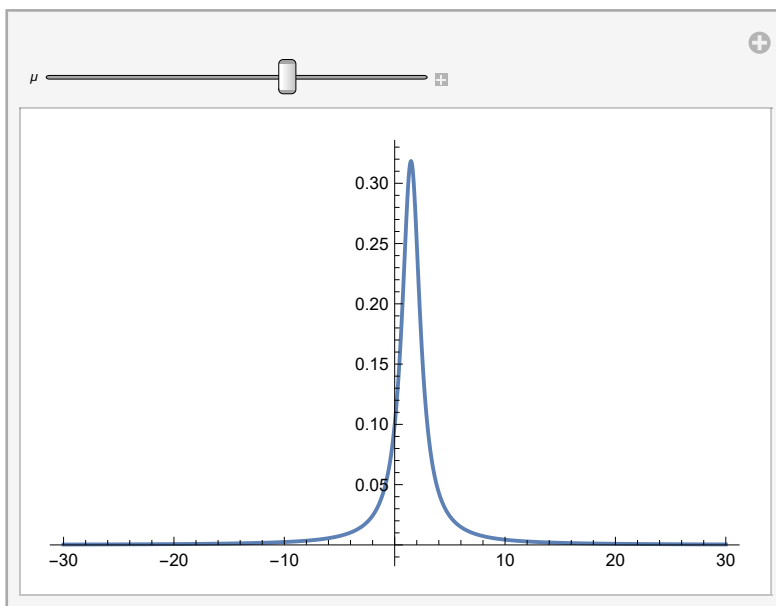
StableDistribution[*type*,  $\alpha$ ,  $\beta$ ,  $\mu$ ,  $\sigma$ ] represents the stable distribution  $S_{type}$  with index of stability  $\alpha$ , skewness parameter  $\beta$ , location parameter  $\mu$ , and scale parameter  $\sigma$ .

▼

In[ ]:= **Manipulate[**

**Plot[PDF[StableDistribution[1, 0,  $\mu$ , 1], x], {x, -30, 30}, PlotRange → All], { $\mu$ , -5, 5}]**

Out[ ]:=

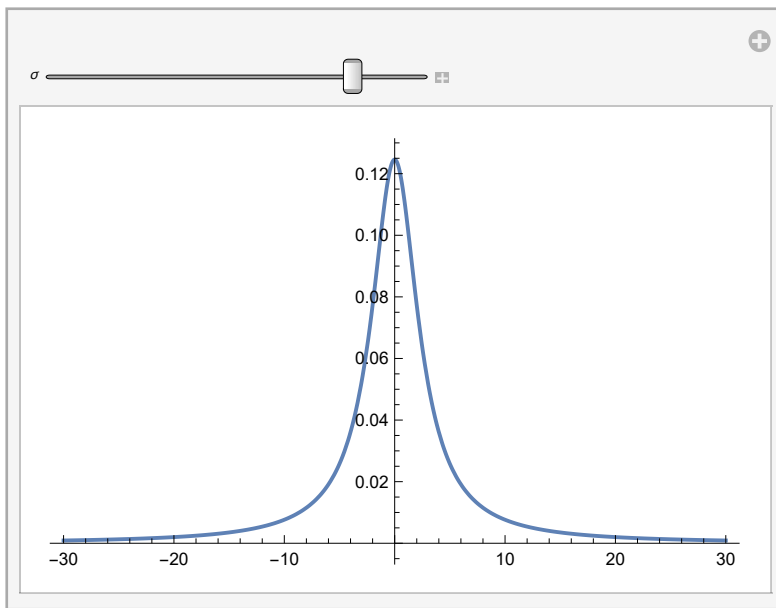


```

In[ ]:= Manipulate[
  Plot[PDF[StableDistribution[1, 0, 0,  $\sigma$ ], x], {x, -30, 30}, PlotRange -> All], { $\sigma$ , 0.3, 3}]

```

Out[ ]=

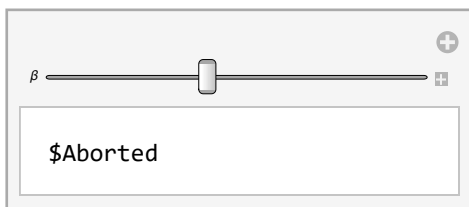


```

In[ ]:= Manipulate[
  Plot[PDF[StableDistribution[1,  $\beta$ , 0, 1], x], {x, -30, 30}, PlotRange -> All], { $\beta$ , -1, 1}]

```

Out[ ]=



```
In[ ]:= Manipulate[  
  Plot[PDF[StableDistribution[ $\alpha$ , 0, 0, 1], x], {x, -30, 30}, PlotRange -> All], { $\alpha$ , 0.1, 2}]
```

Out[ ]=

