Fat Tails [TD]

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Libraries

You can use power-law for the regression as in the previous ABM TP

Another important library is scipy.stats. It contains statistical tests and many distribution

It is possible to fit a t-distribution with

```
scipy.stats.t.fit( r )
```

It returns the df (ν) the location and the scale. It is possible also to plot the PDF with

```
scipy.stats.t.pdf( x, ν , loc, scale )
```

TD

Load the “long_series_logret.csv”

Measure the exponent with a power-law and t-distribution fit.

Plot the distribution and check visually if the two slopes are correct.

Exectute a power-law and t-distribution exponent fit on a sliding window of 1000 days shifting by 15 days each time starting from 2000.