Hand up 1

EDAyA

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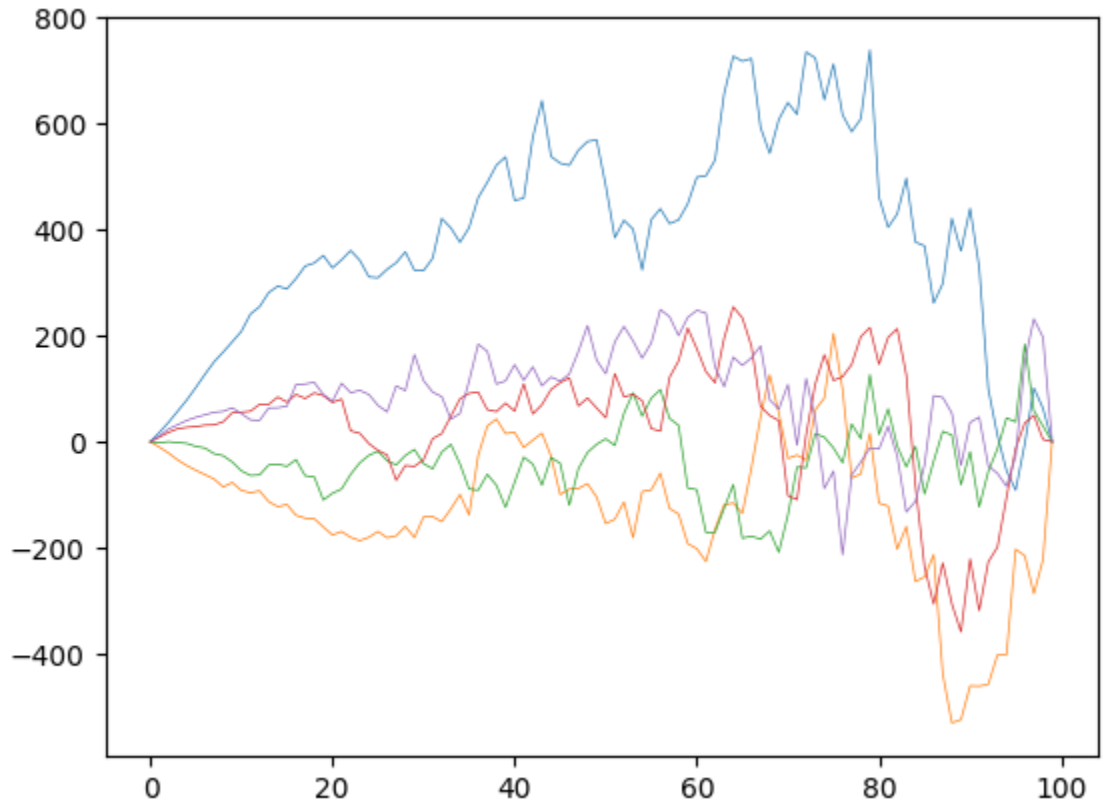
In [ ]:
```
import numpy as np
import matplotlib.pyplot as plt
```

Brownian bridge sin KLE

In [ ]:
```
M = 100
curves = 5
for i in range(curves):
    aleatorios = [np.random.normal() for i in range(M)]
    Y = [(t*sum(aleatorios[0:t]) - t*sum(aleatorios[0:-1])) for t in range(M)]
    X = [i for i in range(M)]

    # fig, ax = plt.subplots()
    plt.plot(np.array(X), Y, linewidth=0.5)
```



Brownian bridge bajo KLE

In [ ]:
```
def suma(peqq, alpha=1000):
```

```
        t_peque = peqq
        t_grande = t_peque * 2
        retorno = 0
        for j in range(1, alpha + 1):
            xi = np.random.normal()
            retorno += ((np.sqrt(2*t_grande)/(j*np.pi))*np.sin((j*np.pi*t_peque)/t_grand
        return retorno


def B(t):
    randomness = [suma(i) for i in np.arange(1, t+1)]
    # return randomness

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    return [(element + randomness[key]) for key, element in enumerate(randomness[1:])]


probar = 50
lineas = 5

for i in range(lineas):
    plt.plot([i for i, j in enumerate(B(probar))], B(probar), linewidth=0.5)
```