H1_graphics

February 23, 2022

[46]:
```python
from mpl_toolkits import mplot3d
import matplotlib.pyplot as plt
```

[47]:
```python
%matplotlib inline
```

[52]:
```python
import matplotlib
import matplotlib.pyplot as plt
import numpy as np

# Data for plotting
t = np.arange(0, 5.0, 0.01)
s = t * np.exp(-2*t)

fig, ax = plt.subplots()
ax.plot(t, s)

ax.set(xlabel='G', ylabel='S = G e^(-2G)',
       title='Aloha caudal')
ax.grid()

fig.savefig("Aloha_throughput.png")
plt.show()
```
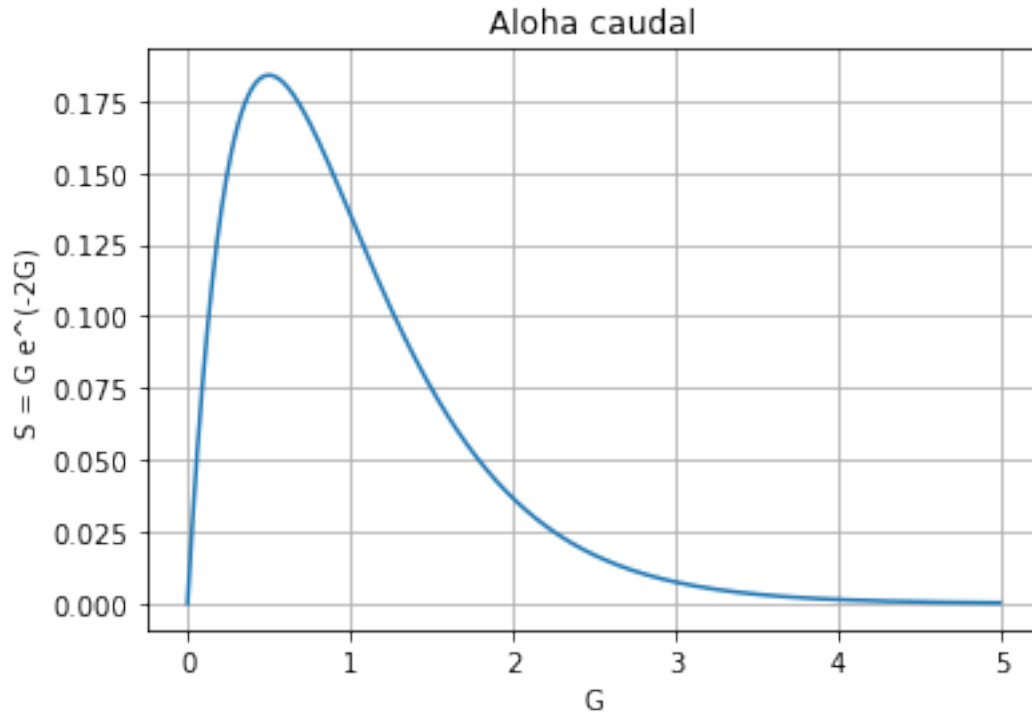
Aloha caudal

Plot with y-axis labeled "S = G e^(-2G)" and x-axis labeled "G". The y-axis ranges from 0.000 to 0.175, x-axis from 0 to 5.

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

      x = np.arange(0, 5.0, 0.1)
      y = np.arange(0, 5.0, 0.1)


      # Compute z to make the pringle surface.
      x2, y2 = np.meshgrid(x, y)
      z = x2 * y2 * np.exp((-2) * x2 * y2)

      ax = plt.figure(figsize=plt.figaspect(0.5)).add_subplot(projection='3d')
      ax.plot_wireframe(x2, y2, z, rstride=10, cstride=10)
      ax.set_title("Grafica 3D Aloha caudal ",fontsize=14,fontweight="bold")
      ax.set_xlabel("lambda")
      ax.set_ylabel("T")
      ax.set_zlabel("S")

      plt.show()
```
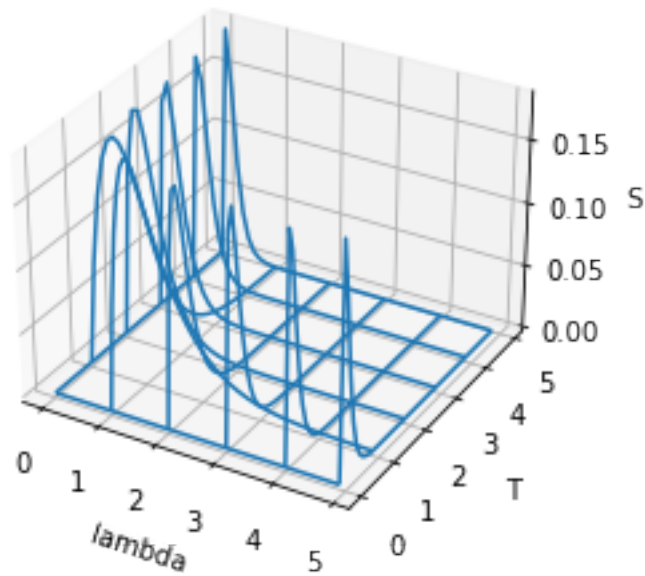
Grafica 3D Aloha caudal


```
[51]: from mpl_toolkits import mplot3d
      import numpy as np
      import matplotlib.pyplot as plt


      # Creating dataset

      x = np.arange(0, 5.0, 0.1)
      y = np.arange(0, 5.0, 0.1)
      x, y = np.meshgrid(x, y)
      z = x * y * np.exp((-2) * x * y)

      # Creating figure
      fig = plt.figure()
      ax = plt.axes(projection ='3d')
      ax.set_title("Grafica 3D Aloha caudal ",fontsize=14,fontweight="bold")
      ax.set_xlabel("lambda")
      ax.set_ylabel("T")
      ax.set_zlabel("S")

      # Creating plot
      ax.contour3D(x, y, z, 50, cmap='binary')

      # show plot
      plt.show()
```
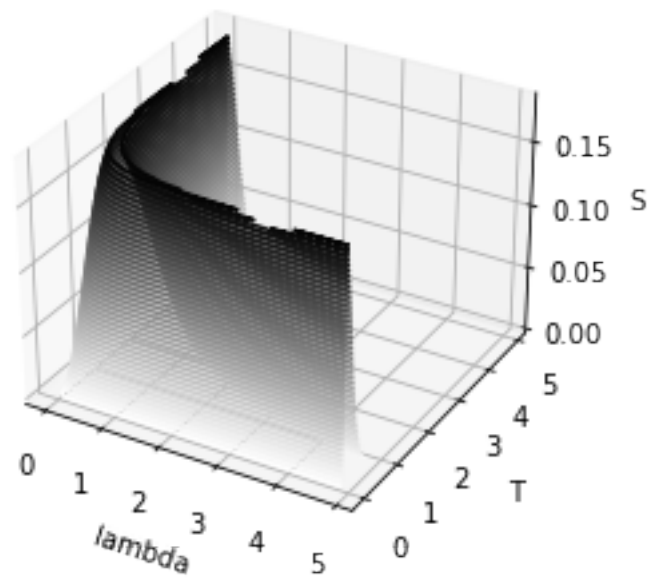
Grafica 3D Aloha caudal

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