Ввод [1]:

```
from PIL import ImageGrab
from IPython.display import display, Image

def ins(ratio=1.0):
    im_data = ImageGrab.grabclipboard()
    new_size = tuple([int(i*ratio) for i in im_data.size])
    thumb = im_data.resize(new_size)
    fn = "temp.PNG"
    thumb.save(fn)
    img = Image(filename=fn)
    display(img)
```

Ввод [2]:

```
import numpy as np
##############
from scipy.stats import * # Основная библиотека в этом семестре
############################
from sympy import *
from scipy.special import *
import math
```

Ввод [3]:

```
# Настройка графика
import matplotlib.pyplot as plt # Основная библиотека
import matplotlib.ticker as ticker
from matplotlib import rcParams
########################
import locale
locale.setlocale(locale.LC_NUMERIC, 'russian')
plt.rcParams['axes.formatter.use_locale'] = True
#########
#########
plt.rcParams['font.size'] = 36
plt.rcParams["font.family"] = "Times New Roman"
plt.rcParams['mathtext.fontset'] = 'cm'
###################
```

Ввод [4]:

```
R1=uniform(0,1)
Phi1=uniform(0,2)
R2=uniform(0,1)
Phi2=uniform(0,2)
```

Ввод [24]:

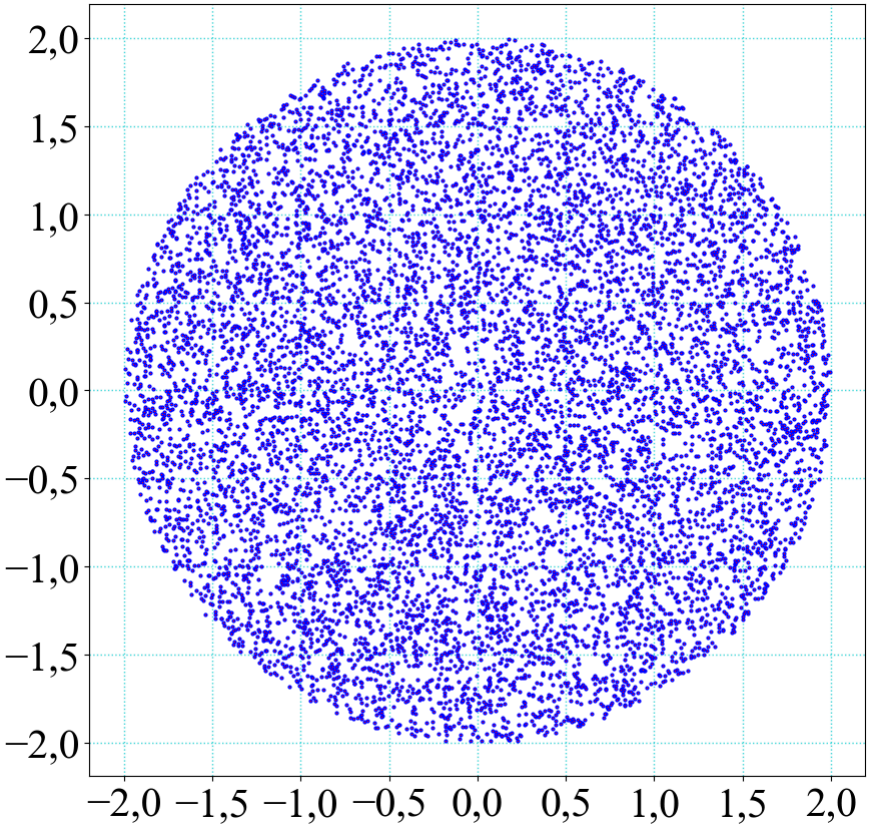
```
r=2
N=10000
length1 = r*np.sqrt(R1.rvs(size=N))
angle1 = np.pi * Phi1.rvs(size=N)
x1 = length1 * np.cos(angle1)
y1 = length1 * np.sin(angle1)
length2 = np.sqrt(R2.rvs(size=N))
angle2 = np.pi * Phi2.rvs(size=N)
x2 = length2 * np.cos(angle2)
y2 = length2 * np.sin(angle2)
x1,y1,x2,y2
```

Out[24]:

```
(array([ 0.06801816, -1.43674489,  0.9964312 , ...,  0.00991239,
         1.342612  , -0.42850923]),
 array([ 0.37965023,  0.45569557, -0.75913696, ...,  1.68109802,
         1.19052717,  0.91168783]),
 array([-0.33687927, -0.60898332, -0.47764293, ..., -0.36625746,
         0.85920415,  0.07380509]),
 array([-0.52429068,  0.42853332,  0.32232452, ..., -0.13059015,
        -0.26101535, -0.97537808]))
```

Ввод [25]:

```
fig, ax = plt.subplots(figsize=(10, 10))
######################
############################
plt.tick_params(labelsize = 30)
ax.xaxis.set_major_locator(ticker.MultipleLocator(0.5))
ax.yaxis.set_major_locator(ticker.MultipleLocator(0.5))
plt.tick_params(labelsize = 30)
plt.grid(color='DarkTurquoise', alpha=0.75, linestyle=':', linewidth=1)
################################################
plt.xlim(0,1)
plt.ylim(0,1)
###################
plt.plot(x1, y1,'o',   markersize=1,\
         markeredgecolor="blue", \
         markeredgewidth=2, markerfacecolor="red")
plt.axis('equal')
plt.show()
```



Ввод [ ]:

```
1
```