Python code for temperature field representation

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import numpy as np
import matplotlib.pyplot as plt
import matplotlib as m
import matplotlib.cm as cm
from mpl_toolkits.axes_grid1.inset_locator import inset_axes
from matplotlib import gridspec
from scipy import special as sp
a = 4.4934
dat = input("Dati k0,k1,k2 ")
dat = dat.split(",")
k = []
for i in range (3) :
    k.append(float(dat[i]))
r = np.linspace(0.01,1,100)
t = np.linspace(0,2*np.pi,100)
fig = plt.figure()
spec = gridspec.GridSpec(ncols = 1, nrows = 2, height_ratios = [7,1])
ax1 = fig.add_subplot(spec[0])
ax0 = fig.add_subplot(spec[1])
ax0.axis("off")
x = np.cos(t)
y = np.sin(t)
ax1.plot(x,y, color = "black", linewidth = 3)
r,t = np.meshgrid(r,t)
x = r*np.cos(t)
y = r*np.sin(t)
g = k[2]*sp.jv(1.5, a*r)/np.sqrt(r)
g = k[0] - k[1]*r*r + g*np.cos(t)
vi = np.amin(g)
vx = np.amax(g)
norm = m.colors.Normalize(vmin = vi, vmax = vx)
a = plt.cm.ScalarMappable(cmap = cm.jet, norm = norm)
a.set_array(np.linspace(vi,vx,13))
a.autoscale()
plt.cm.ScalarMappable.changed(a)
axins = inset_axes(ax0, height = "16%", width = "100%", loc = "lower left")
fig.colorbar(a, cax = axins, orientation = "horizontal")
levels = np.linspace(vi,vx,13)
cs = ax1.contour(y,x,g, levels[1::2], linewidths = 2)
ax1.clabel(cs, levels[1::2], fontsize = 8, fmt = "%.2f", inline = True)
ax1.contourf(y,x,g, levels, cmap = cm.jet , extend = "both")
ax0.set_title("Temperature scale", fontdict = ({"fontname" : "DejaVu Sans",
"fontsize" : 9}))
ax1.set_title("Fig.2 Temperature", fontdict = ({"fontname" : "DejaVu Sans",
"fontsize" : 10}))
ax1.set_xlabel("x axis")
ax1.set_ylabel("y axis")
#fig.savefig("/home/victor/Dokumente/temp.png")
plt.show()
```