Spatial CG Gamma

June 9, 2024

Input Data Setup (from 2PT simulation)

[9]:
```
import numpy as np
import matplotlib.pyplot as plt

# Data setup
x = np.array([1.114981927, 1.068530447, 1.024623845, 0.983090201, 0.943771348,␣
 ↪0.906521602, 0.871206628])
y = np.array([400, 420, 440, 460, 480, 500, 540, 600, 700])
z=[[-8.350664696,       -8.251616561,   -8.134682129,   -8.108190173    ,-8.
 ↪030653893   ,-8.205965039   ,-7.886118001,  -7.573268862,   -7.
 ↪490164151],[-7.962327245     ,-7.72254808,   -7.795628442    ,-7.508881263, ␣
 ↪-7.791187664,   -7.500747033    ,-7.421179995,  -7.024042341    ,-6.
 ↪886246314],[-7.324310507    ,-7.220653445   ,-7.38531578    ,-7.115195377, ␣
 ↪-7.038986929,   -6.806730391,   -6.933073652,   -6.624169523,   -6.
 ↪301872096],[-6.880598523     ,-6.821895336   ,-6.776221263   ,-6.691949338  ␣
 ↪,-6.42496596    ,-6.479540544,  -6.217916087,   -6.104434303,   -5.
 ↪919259663],[-6.445156504,     -6.285672734,    -6.473408569,    -6.099274599␣
 ↪,   -6.066442022,    -5.946512438,    -5.87453714,     -5.784456003,    -5.
 ↪437574425],[-6.134463969 ,    -5.964078499  ,  -5.822309745    ,-5.641375444␣
 ↪,   -5.747484208 ,   -5.617364952    ,-5.437892931  ,  -5.305080596    ,-5.
 ↪032442189],[-5.898116274 ,    -5.566860978  ,  -5.466870847   , -5.256647248␣
 ↪   ,-5.241172717   , -5.044642578  ,  -5.0571771      ,-4.930580562  ,  -4.
 ↪523628984]]
zz = np.transpose(z)
x = np.log(x)
y = np.log(y)
```

Figure Setup

[10]:
```
plt.ion()
plt.figure()
plt.rcParams.update({
    'font.size': 16,
    'font.family': 'DejaVu Sans',   # Default font
    #'font.family': 'Whitney Book', # Actual font used in the paper (needs to␣
 ↪install font first)
    'axes.labelsize': 16,
```

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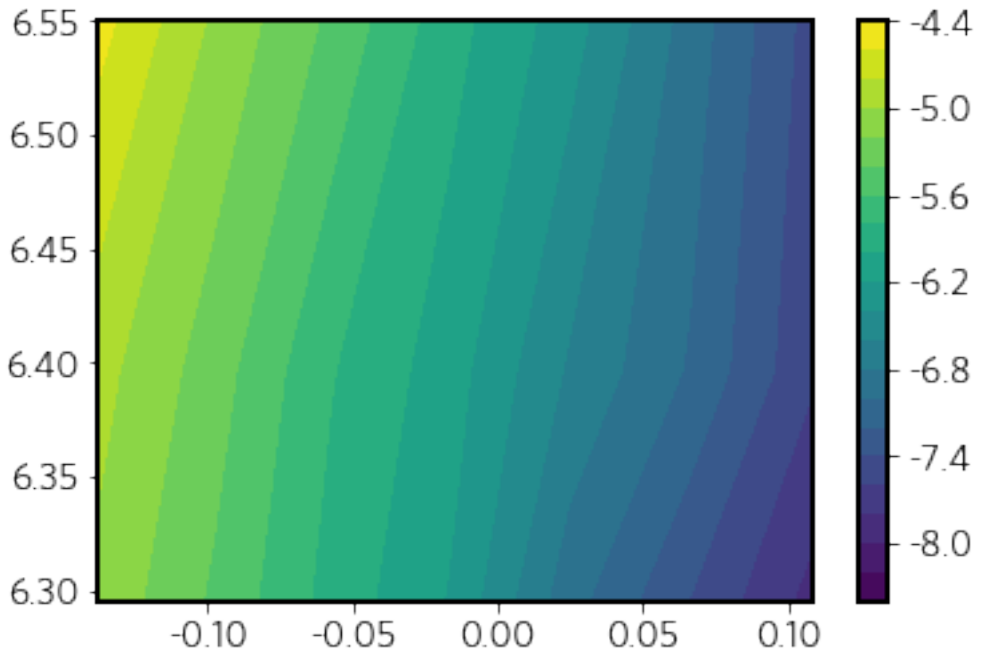
    'axes.titlesize': 18,
    'xtick.labelsize': 14,
    'ytick.labelsize': 14,
    'legend.fontsize': 14
})
plt.rcParams['axes.unicode_minus'] = False

plt.ylim(6.295,6.55)
ax = plt.gca()
for spine in ax.spines.values():
    spine.set_linewidth(2)  # Set the border width here
cs = plt.contourf(x,y,zz,levels=20)
cbar = plt.colorbar(cs)
for spine in cbar.ax.spines.values():
    spine.set_linewidth(2)
#cbar.set_label('Value', fontsize=16)
plt.savefig('excess.png', dpi=300, bbox_inches='tight')
plt.savefig('excess.pdf', dpi=600, bbox_inches='tight')
```



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