import warnings  
import glob  
warnings.filterwarnings("ignore")  
from nilearn import plotting  
from nilearn.image import load\_img, coord\_transform  
import matplotlib.pyplot as plt  
import numpy as np  
%matplotlib inline

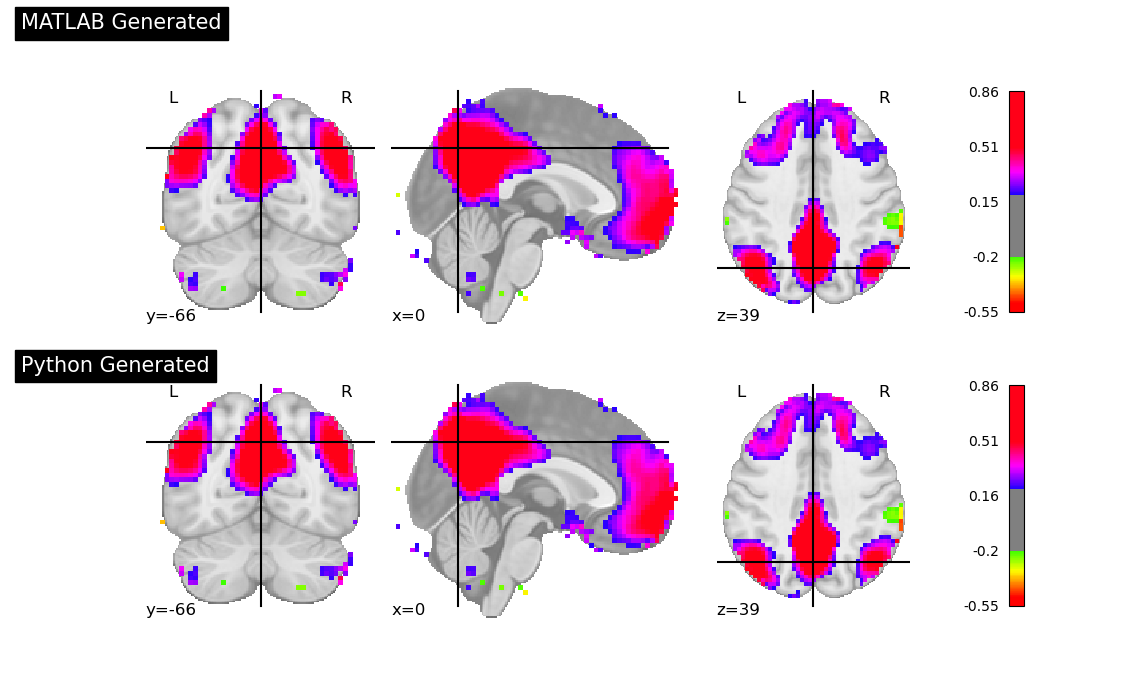
def display\_py\_mat(mat\_file, py\_file, threshold=0, c\_coords=(0, 0, 0)):  
 fig, axes = plt.subplots(nrows=2, ncols=1, figsize=(11.5, 7))  
 plotting.plot\_stat\_map(mat\_file,   
 threshold=threshold, cut\_coords=c\_coords, display\_mode='ortho',  
 cmap=plt.cm.hsv, vmax=0.5, symmetric\_cbar=False, axes=axes[0],  
 title='MATLAB Generated')  
 plotting.plot\_stat\_map(py\_file,   
 threshold=threshold, cut\_coords=c\_coords, display\_mode='ortho',  
 cmap=plt.cm.hsv, vmax=0.5, symmetric\_cbar=False, axes=axes[1],  
 title='Python Generated')  
 plt.tight\_layout()  
 plt.show()

files = sorted(glob.glob('\*.nii'))

# PCC

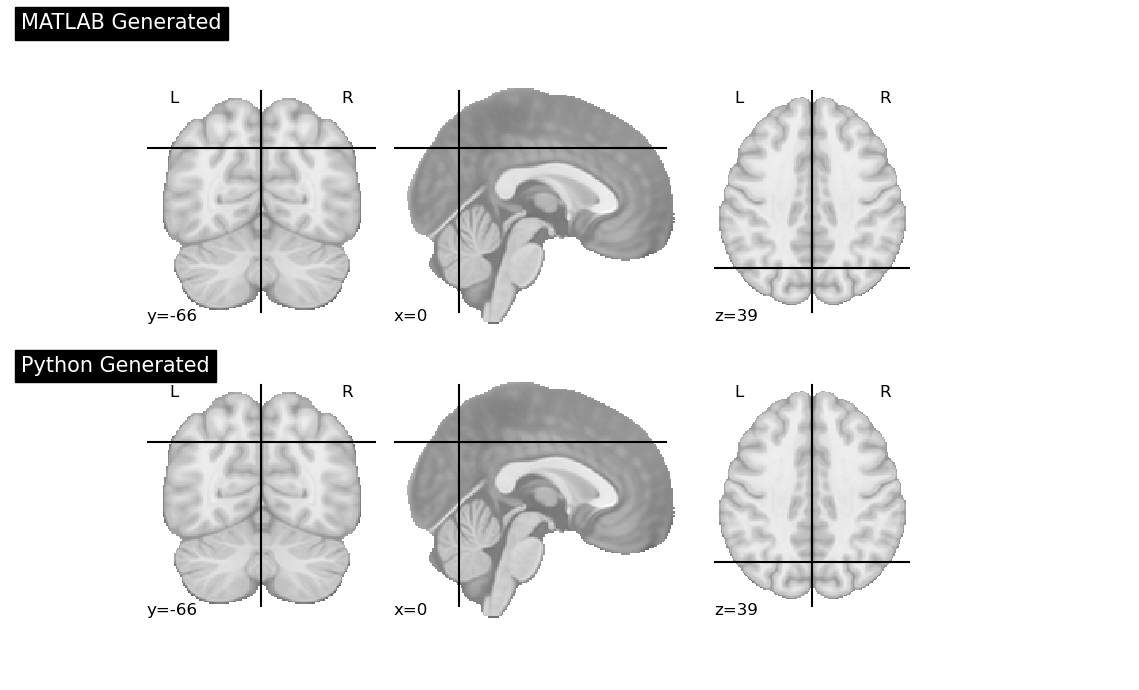
## Rest, FC

display\_py\_mat(files[0], files[8], threshold=0.2, c\_coords=(0, -66, 39))



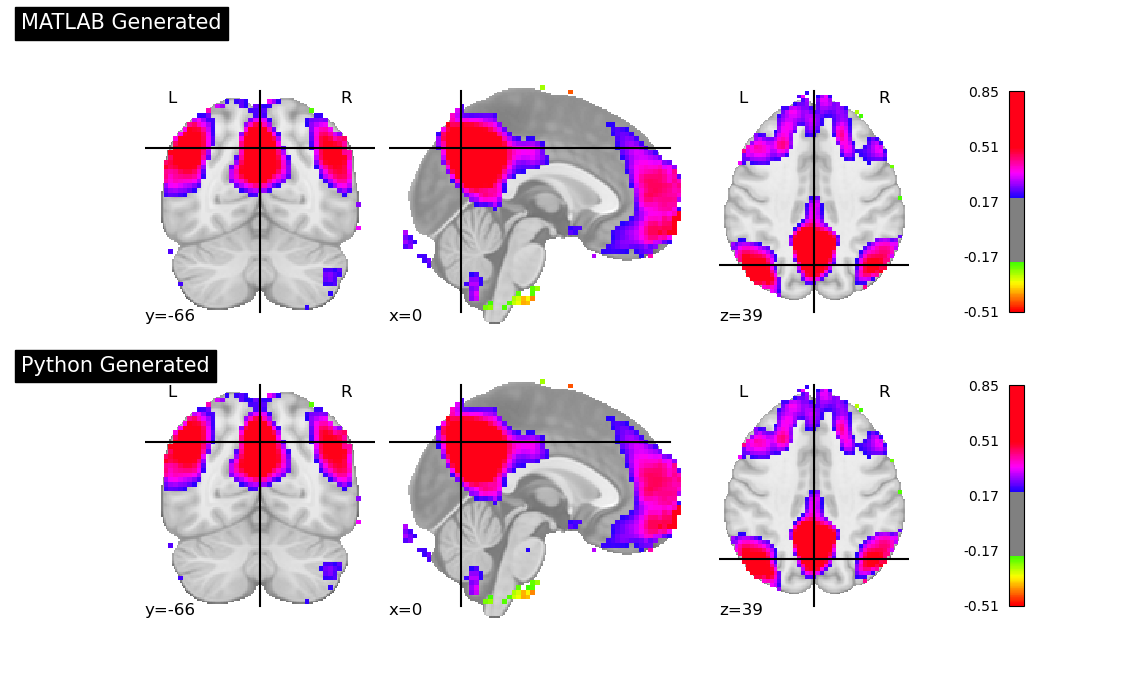
## Rest, ISFC

display\_py\_mat(files[1], files[9], threshold=0.2, c\_coords=(0, -66, 39))



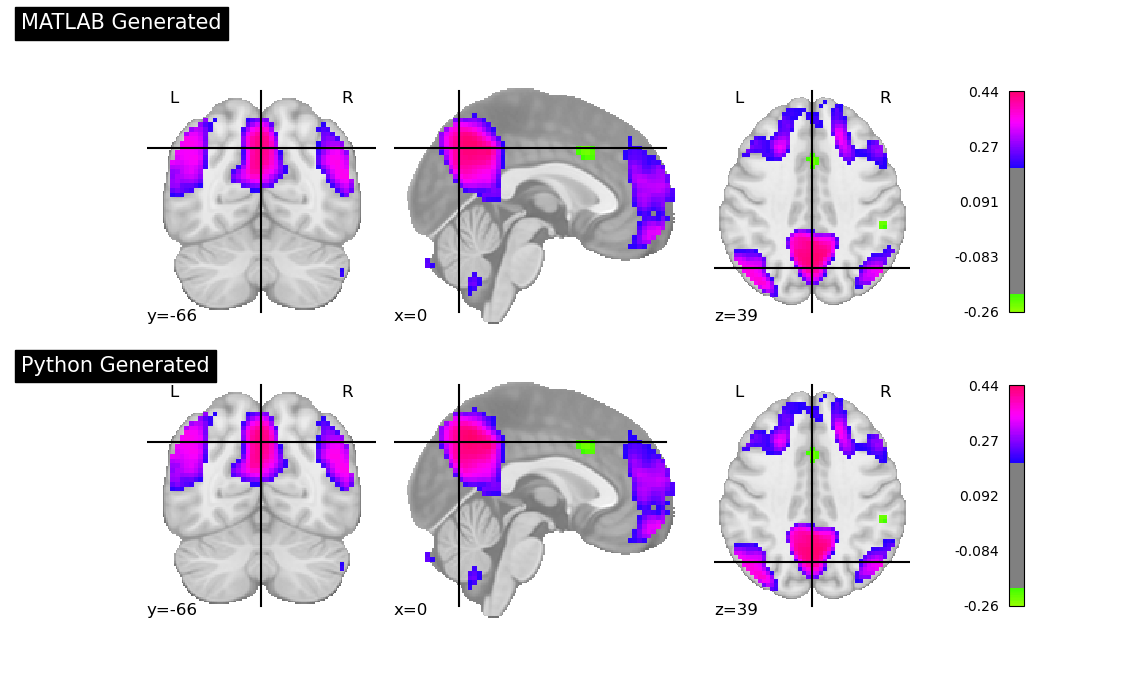
## Task, FC

display\_py\_mat(files[2], files[10], threshold=0.2, c\_coords=(0, -66, 39))



## Task, ISFC

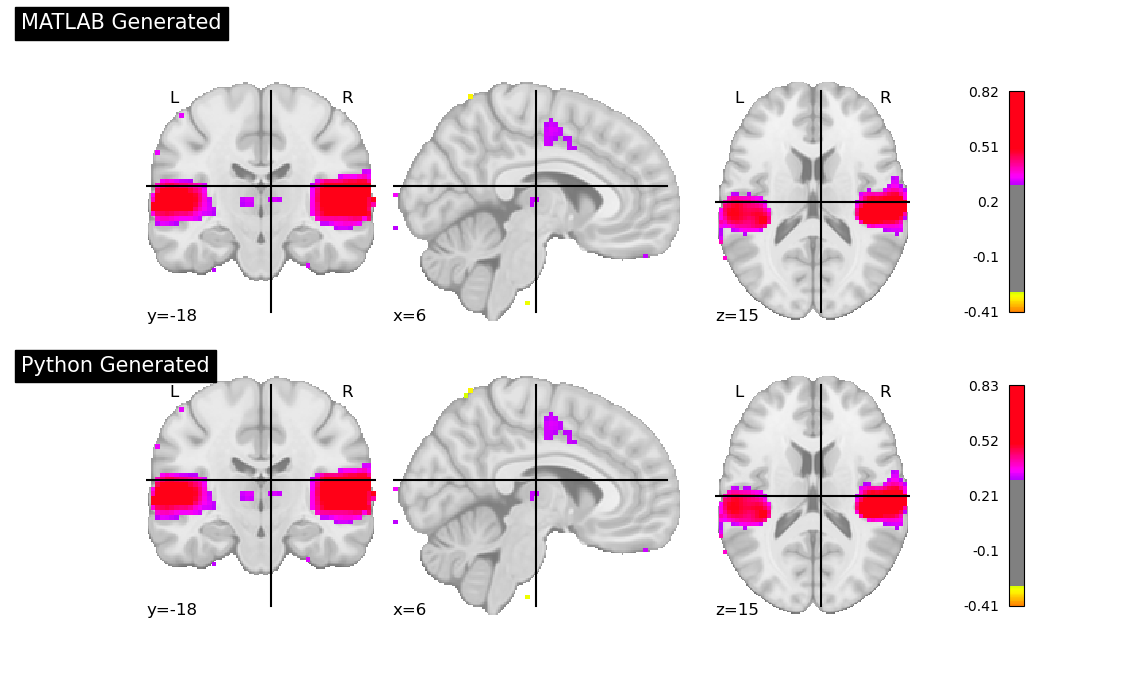
display\_py\_mat(files[3], files[11], threshold=0.2, c\_coords=(0, -66, 39))



# Auditory Network

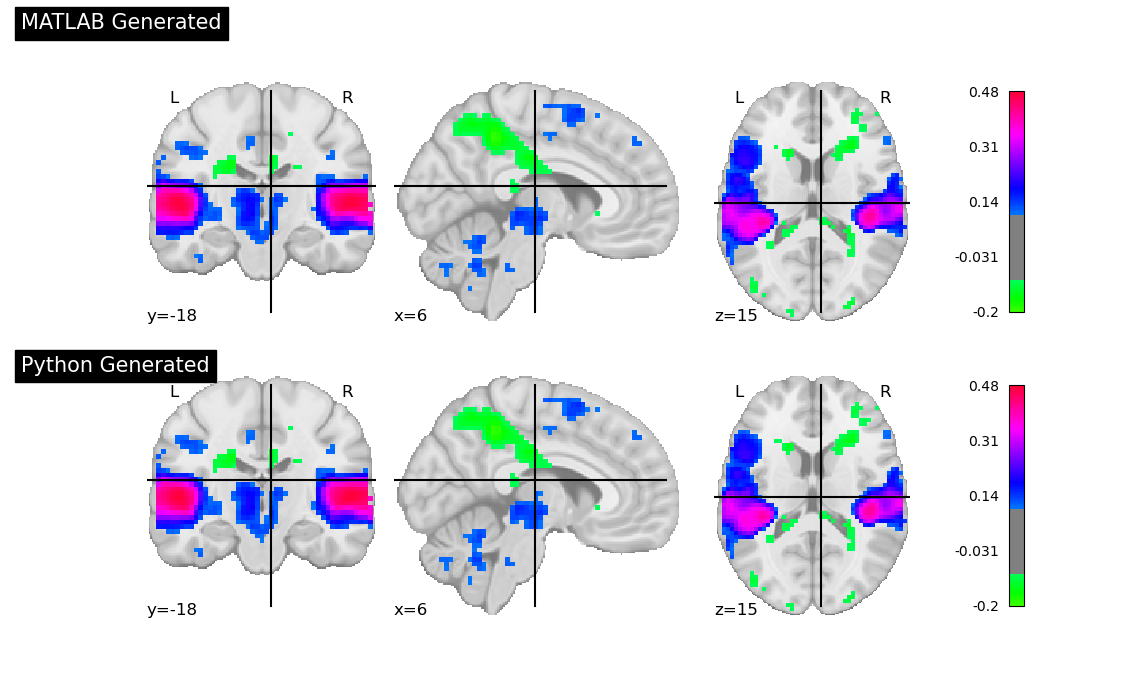
## ROI=1 (A1\_R), FC

display\_py\_mat(files[4], files[12], threshold=0.3, c\_coords=(6, -18, 15))



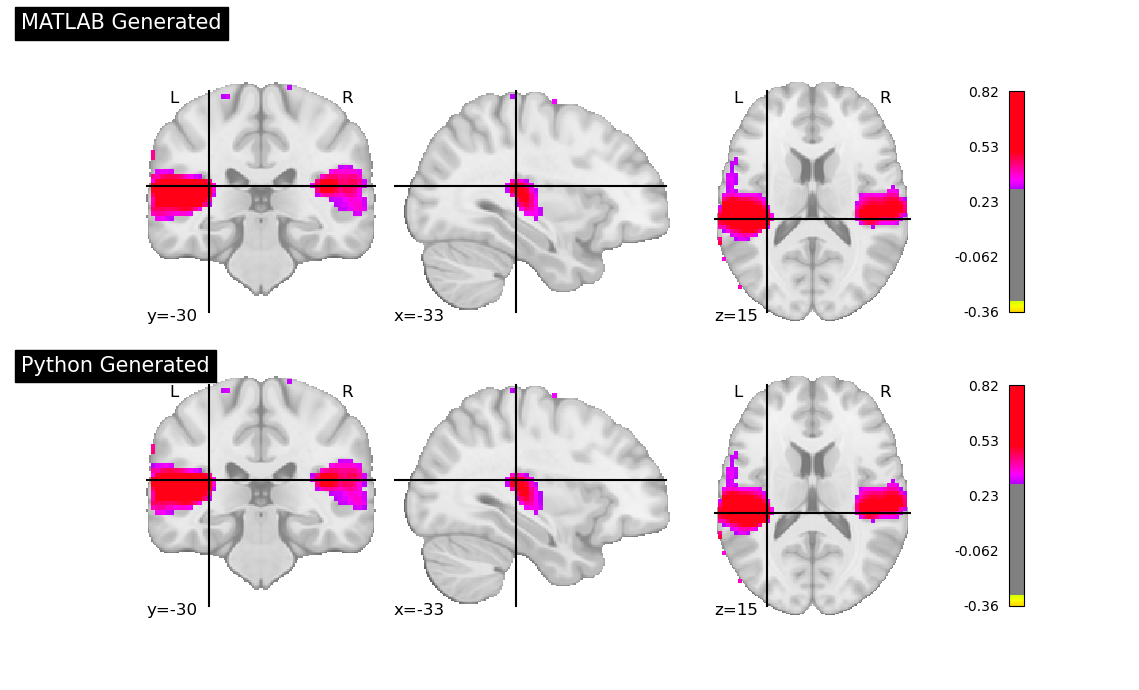
## ROI=1 (A1\_R), ISFC

display\_py\_mat(files[5], files[13], threshold=0.1, c\_coords=(6, -18, 15))



### ROI=5 (A1\_L), FC

display\_py\_mat(files[6], files[14], threshold=0.3, c\_coords=(-33, -30, 15))



### ROI=5 (A1\_L), ISFC

display\_py\_mat(files[7], files[15], threshold=0.1, c\_coords=(-33, -30, 15))

