XY PLOT

November 5, 2015

In [2]:
```
import matplotlib.pyplot as plt
import csv
import math
import numpy as np
import matplotlib
```

In [74]:
```
a = []
with open('percentages_of_triva_w.r.t_mv.csv','r') as f:
    reader = csv.reader(f)
    for row in reader:
        a.append(row)
b = []
with open('percentages_of_movies_per_year.csv','r') as f:
    reader = csv.reader(f)
    for row in reader:
        b.append(row)
b.sort()
#print b[len(b)-1]
l = len(b)
x = range(l)
#print x
#print b
a = np.asarray(a)
#print a
b = np.asarray(b)
b_x = b[:,0]
#print b_x
b_y = b[:,1]
b_yl = b_y.tolist()
#print type(b_yl)
b_yl =[float(i) for i in b_yl]
#print max(b_yl),min(b_yl)
#print b_yl

b_xl = b_x.tolist()
b_xl = [int(i) for i in b_xl]

#print a
dic_a ={}
for i in a:
    dic_a[i[0]]=i[1]
#print dic_a
bb = sorted(dic_a)
y2 = []
```

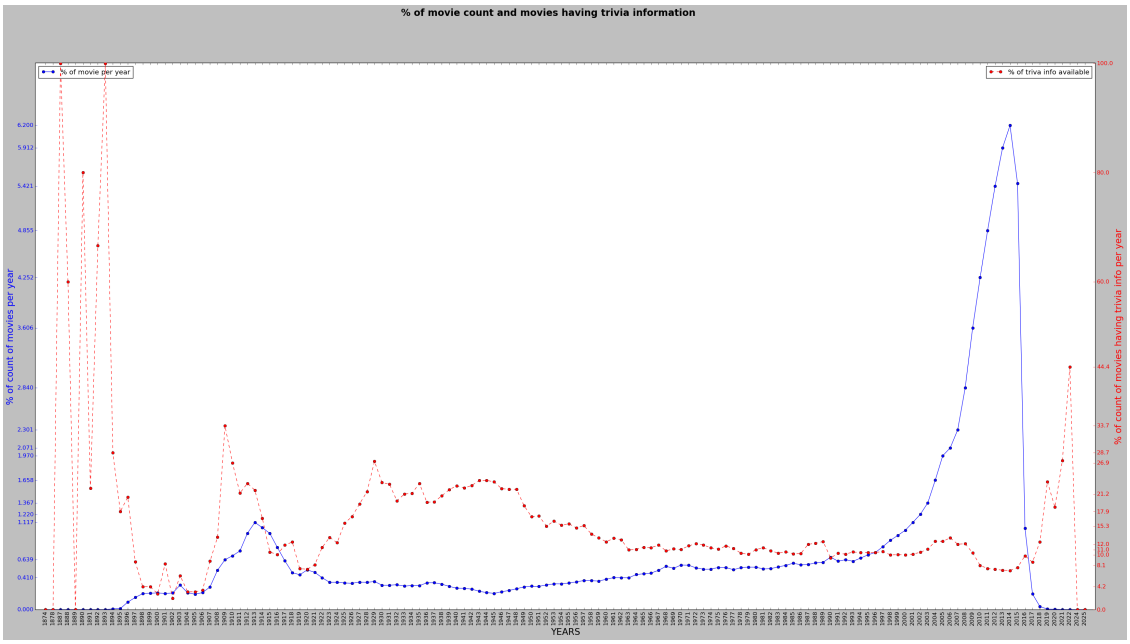
```
        for i in bb:
            y2.append(dic_a[i])
        y2 = [float(i) for i in y2]

        #print dic_a['2021']
```

In [84]:
```
        fig_size = plt.rcParams["figure.figsize"]
        print "Current size:", fig_size
        ax = plt.axes()
        ax.set_yticks([0.0001,0.6392,0.41,1.1166,1.2201, 1.3675, 1.6577, 1.9702, 2.0712, 2.3015, 2.840
        fig_size[0] = 40
        fig_size[1] = 20
        plt.suptitle('% of movie count and movies having trivia information', fontsize=20, fontweight=
        ax.tick_params(axis='y', colors='b')
        plt.xticks(x,b_xl,rotation='vertical')
        #plt.yticks(b_yl)
        ax.plot(x,b_yl,marker='o',label='% of movie per year')
        ax.set_ylim([0, math.ceil(max(b_yl)+0.1)])
        ax.margins(0.01)
        ax.set_xlabel('YEARS',fontsize = 19)
        ax.set_ylabel("% of count of movies per year",fontsize = 19,color = 'b')
        ax2 = ax.twinx()
        ax2.set_yticks([min(y2),4.192286193404136,8.10998087530142,10.033178500331786,10.98353552859618
        ax2.plot(x,y2,marker='o', linestyle='--', color='r',label = '% of triva info available')
        ax2.set_ylabel("% of count of movies having trivia info per year",fontsize = 19,color = 'r')
        ax2.set_ylim(0,math.ceil(max(y2))+0.1)
        ax2.legend(loc=0)
        ax2.tick_params(axis='y', colors='r')
        ax.legend(loc=2)
        ax2.margins(0.01)

        #ax.plot(0,0,marker='o', linestyle='--', color='r', label = '% of triva info available')
        #h1, l1 = ax.get_legend_handles_labels()
        #h2, l2 = ax2.get_legend_handles_labels()
        #ax.legend(h1+h2, l1+l2, loc=2)
```

```
Current size: [40, 20]
```


% of movie count and movies having trivia information
% of movie per year
% of triva info available
% of count of movies per year
% of count of movies having trivia info per year
YEARS

In [ ]:

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