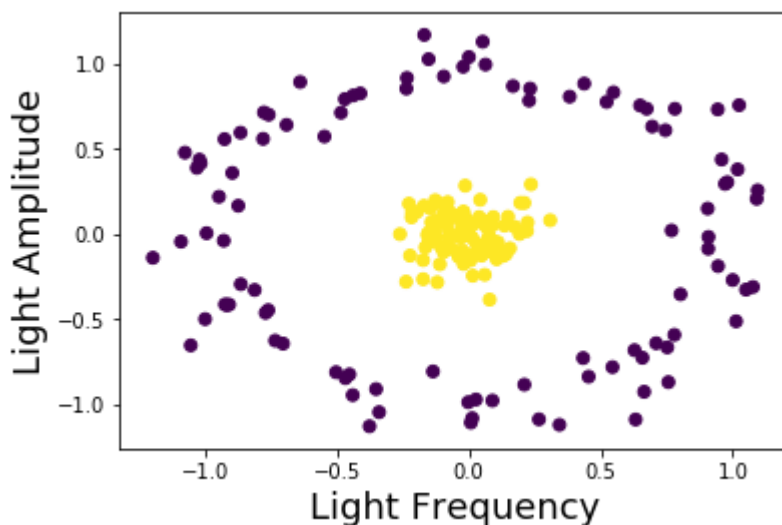


```
In [1]: import matplotlib.pyplot as plt
from sklearn.datasets.samples_generator import make_circles
x,y = make_circles(200, factor=.1 ,noise=.1)
from sklearn.svm import SVC
```

```
In [2]: import pandas as pd
X=pd.DataFrame(x)
```

```
In [3]: x_train=x[1:140]
y_train=y[1:140]
x_test=x[140:]
y_test=y[140:]
```

```
In [4]: #Make scatter plot and see
plt.scatter(X.iloc[:,0],X.iloc[:,1],c=y)
plt.xlabel('Light Frequency',fontsize =18)
plt.ylabel('Light Amplitude',fontsize =18)
plt.show()
```



```
In [5]: clf = SVC(kernel = 'rbf',C=1E6) #C is cost function the tuning parameter used to
clf.fit(x_train,y_train)
```

```
Out[5]: SVC(C=1000000.0, cache_size=200, class_weight=None, coef0=0.0,
decision_function_shape='ovr', degree=3, gamma='auto', kernel='rbf',
max_iter=-1, probability=False, random_state=None, shrinking=True,
tol=0.001, verbose=False)
```

```
In [6]: from sklearn.metrics import accuracy_score
predicted_svc=clf.predict(x_test)
accuracy = round(accuracy_score(predicted_svc,y_test)*100,5)
print("Accuracy of SVC model is",accuracy,"%")
```

Accuracy of SVC model is 100.0 %

```
In [ ]:
```

In []:

In []: