```
import matplotlib.pyplot as plt
import MFModel
import MLPModel
import MFMLPModel
```

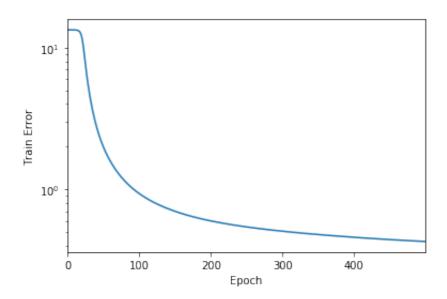
Using TensorFlow backend.

```
M1 = MFModel MFModel()
```

M1.eval()

MF model test err = 1.1158908942924153

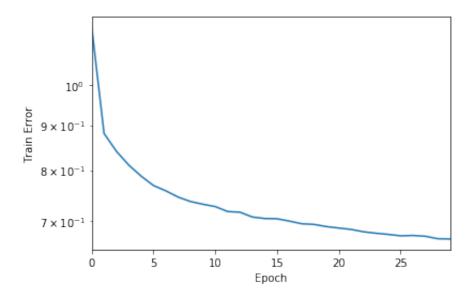
## M1.pplot()



M2 = MLPModel(epochs=30)

M2.eval()

## M2.pplot()



M3 = MFMLPModel.MFMLPModel(epochs=30, mf\_latent=8, learning\_rate=0.005)

M3.eval()

MF-MLP model test err = 0.865658663149873

M3.pplot()

