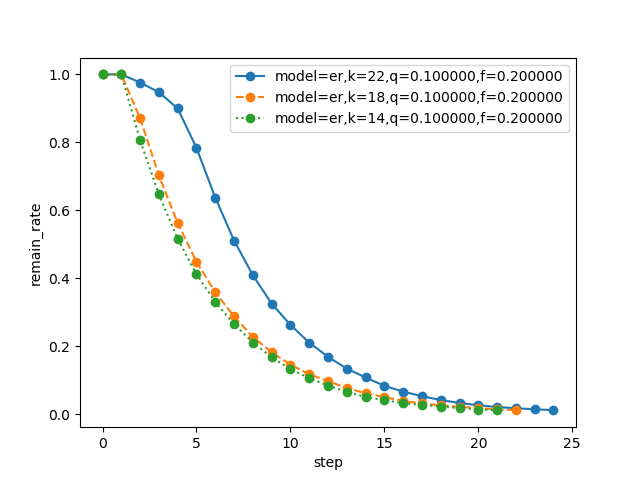
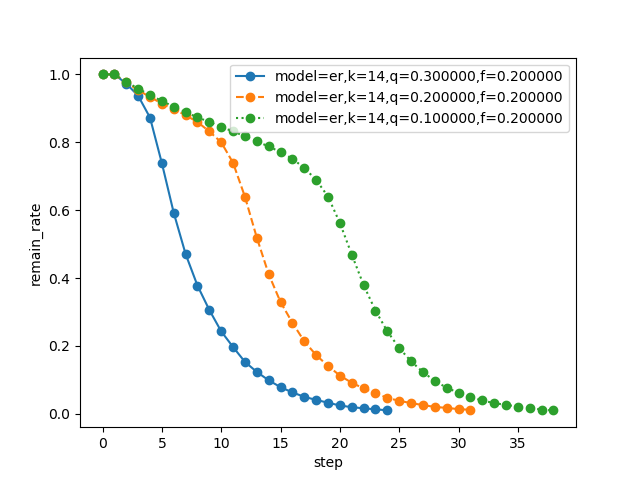
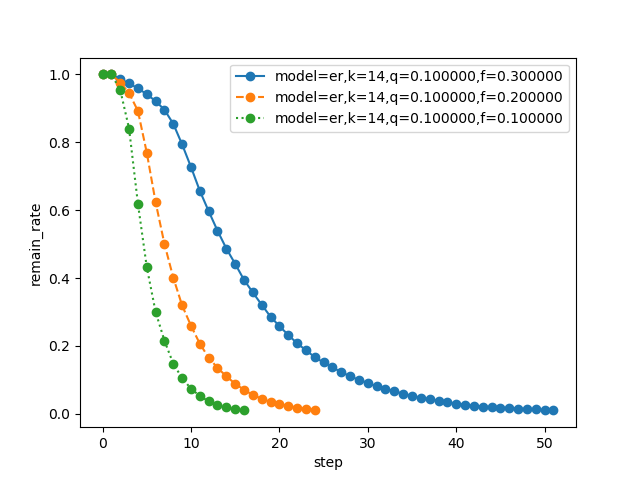
# 传统kq模型

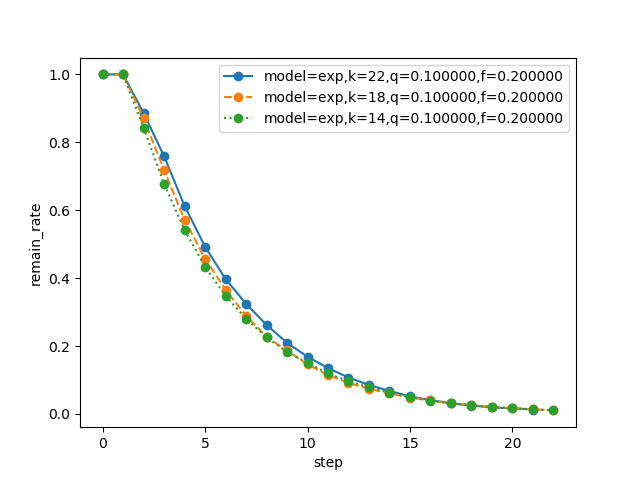
## Er网络

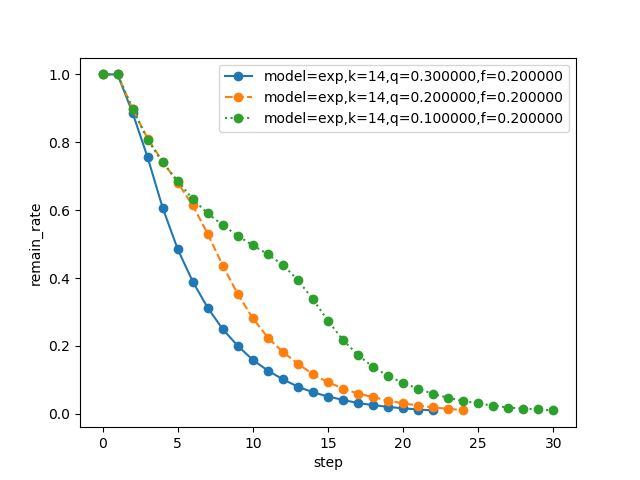


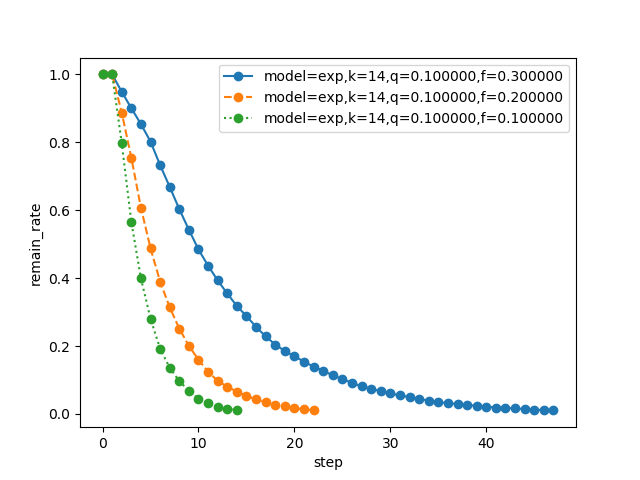




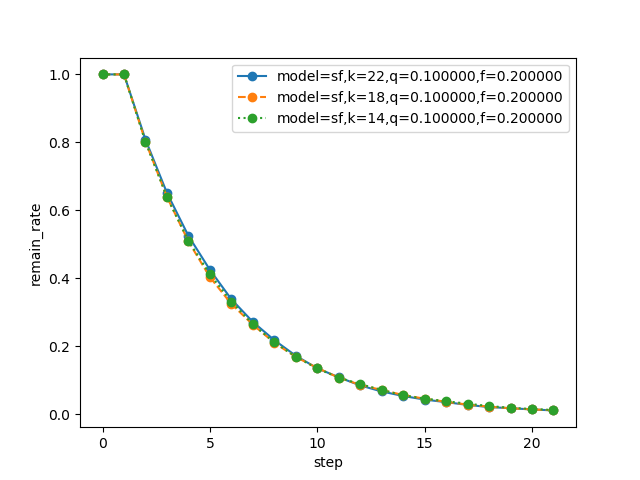
## Exp网络

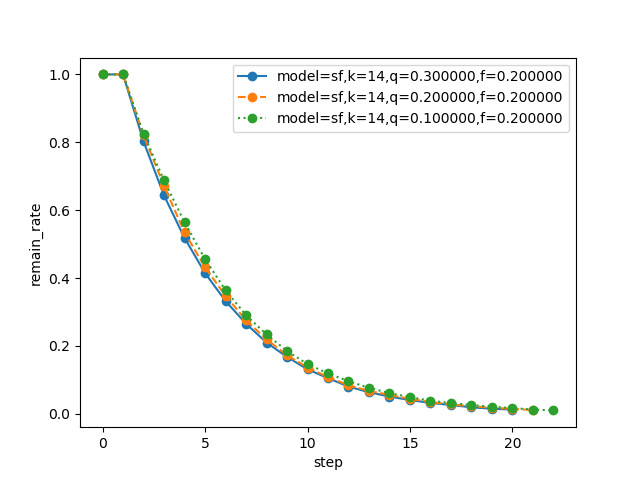


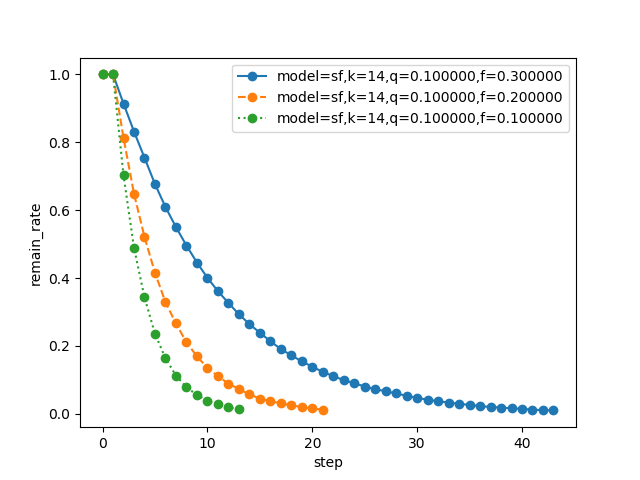




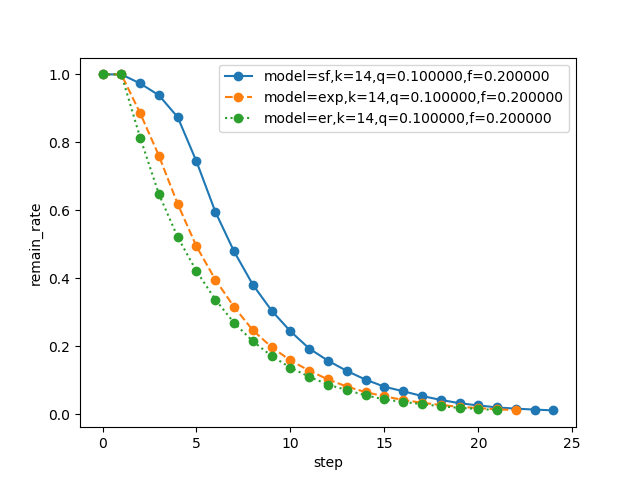
## Sf网络





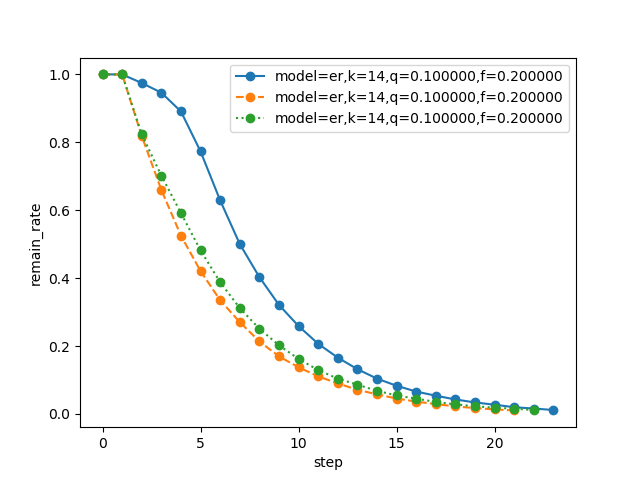


## 三种网络对比

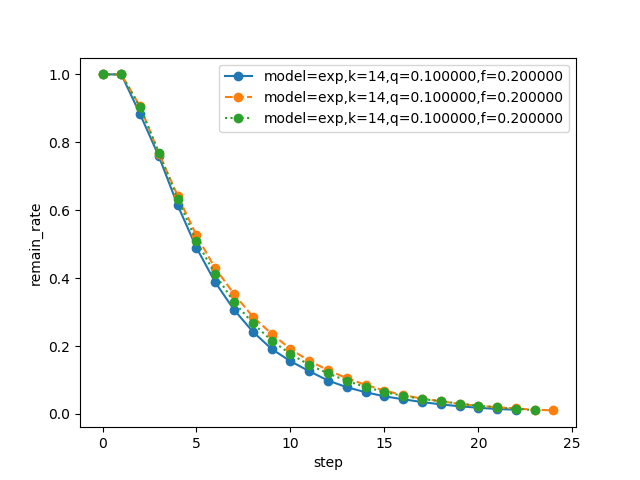


# 攻击方式

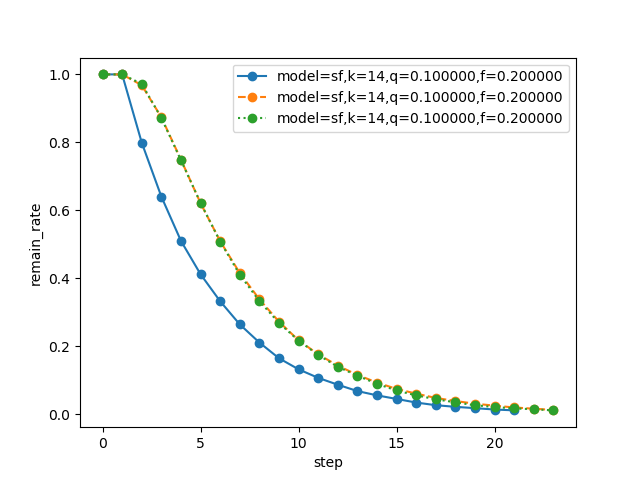
## Er网络



## Exp网络

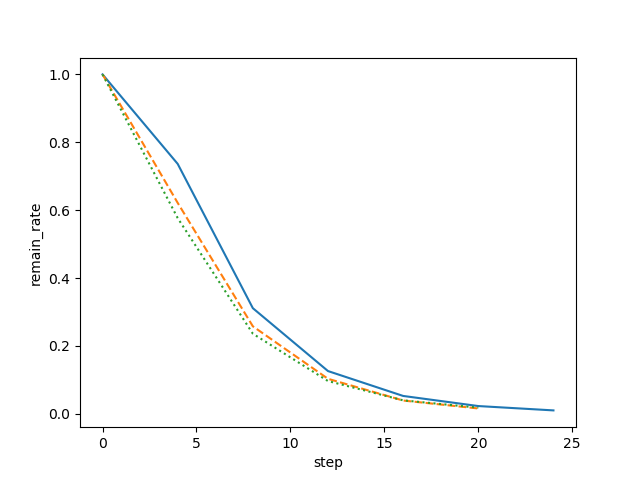


## Sf网络

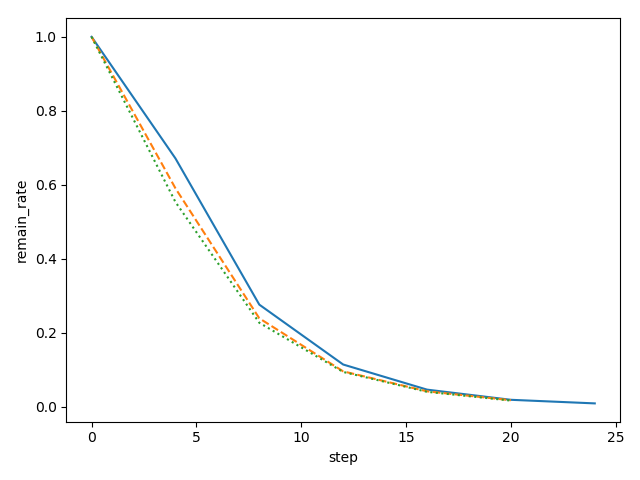


EXP网络：

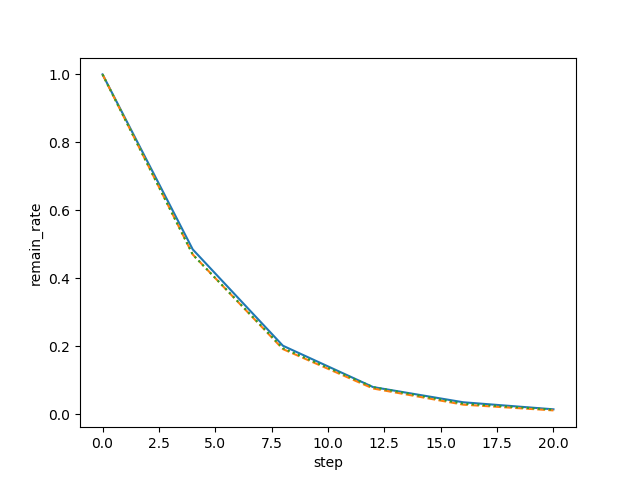
K=10 14 18 q=0.1 f=0.2



随机删除%1

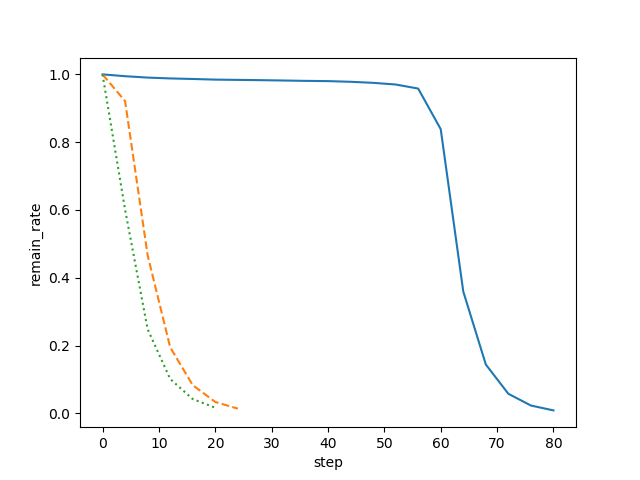


EXP网络 同上参数 随机先删除百分10结点

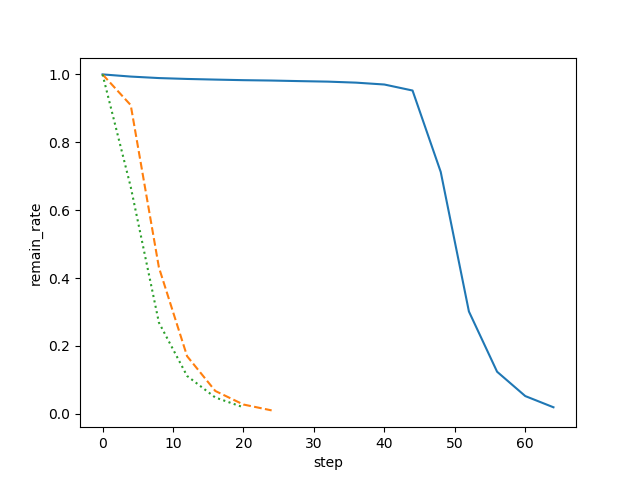


变快？且k越小影响越大

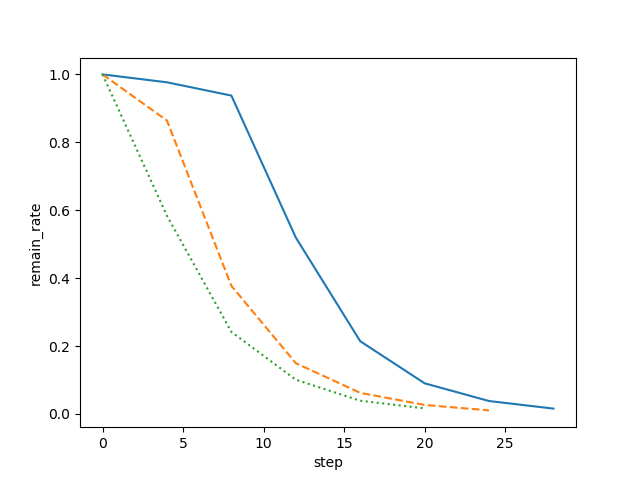
ER网络 参数同上



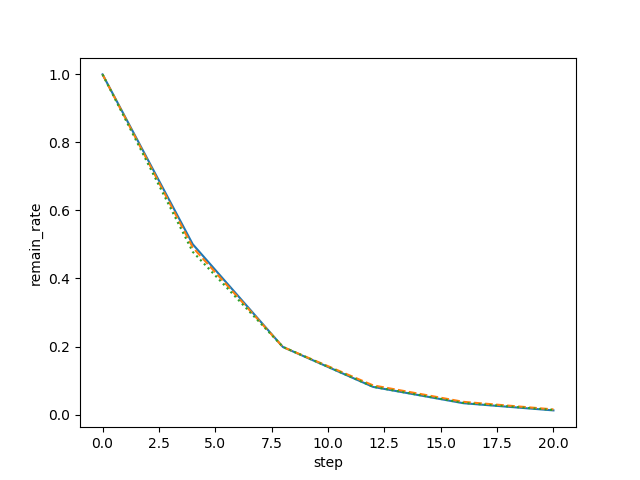
Er随机删除0.1%



Er随机删除%1



ER随机删除 百分10



Exp