

**NDCG@20**

1.0  
0.8  
0.6  
0.4  
0.2

BASE

REP

EXP

FEA

FEA+REP

FEA+EXP

FEA+DIS

FEA+DIS+REP

FEA+DIS+EXP

Initial

DetConstSort

**0.30**

**0.30**

**0.29**

**0.30**

**0.30**

**0.30**

**0.29**

**0.30**

**0.30**

**0.31**

**0.29**

