|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Model | Hyperparameter | t1=0.5 | t1=0.55 | t1=0.6 | t1=0.65 | t1=0.7 | t1=0.75 | t1=0.8 | t1=0.85 | t1=0.9 |
| Ours | lr: 0.005 | 0.782  ±0.168 | 0.743  ±0.180 | 0.684  ±0.192 | 0.607  ±0.203 | 0.509  ±0.207 | 0.385  ±0.198 | 0.245  ±0.164 | 0.110  ±0.104 | 0.021  ±0.034 |
| Ours | lr: 0.001 | 0.780  ±0.169 | 0.739  ±0.180 | 0.682  ±0.193 | 0.609  ±0.203 | 0.509  ±0.206 | 0.383  ±0.194 | 0.239  ±0.154 | 0.101  ±0.092 | 0.019  ±0.029 |
| Ours | lr: 0.0005 | 0.772  ±0.179 | 0.730  ±0.189 | 0.671  ±0.199 | 0.594  ±0.207 | 0.493  ±0.209 | 0.368  ±0.195 | 0.230  ±0.155 | 0.100  ±0.093 | 0.019  ±0.031 |
| Ours | lr: 0.0001 | 0.770  ±0.183 | 0.727  ±0.197 | 0.666  ±0.209 | 0.588  ±0.219 | 0.487  ±0.220 | 0.363  ±0.202 | 0.226  ±0.160 | 0.099  ±0.095 | 0.018  ±0.030 |
| Ours | lr: 0.005 | 0.782  ±0.169 | 0.743  ±0.181 | 0.686  ±0.193 | 0.611  ±0.201 | 0.511  ±0.204 | 0.384  ±0.192 | 0.239  ±0.154 | 0.103  ±0.093 | 0.019  ±0.030 |
| Ours | lr: 0.001 | 0.783  ±0.175 | 0.743  ±0.188 | 0.684  ±0.202 | 0.609  ±0.213 | 0.510  ±0.216 | 0.385  ±0.203 | 0.243  ±0.165 | 0.108  ±0.105 | 0.021  ±0.034 |
| Ours | lr: 0.0005 | 0.776  ±0.174 | 0.734  ±0.184 | 0.673  ±0.197 | 0.597  ±0.207 | 0.495  ±0.211 | 0.369  ±0.198 | 0.229  ±0.156 | 0.098  ±0.094 | 0.018  ±0.030 |
| Ours | lr: 0.0001 | 0.768  ±0.181 | 0.726  ±0.195 | 0.666  ±0.208 | 0.589  ±0.217 | 0.492  ±0.215 | 0.368  ±0.199 | 0.228  ±0.156 | 0.097  ±0.091 | 0.017  ±0.028 |
| Ours | lr: 0.005 | **0.786**  **±0.171** | **0.749**  **±0.183** | **0.692**  **±0.198** | **0.619**  **±0.209** | **0.524**  **±0.215** | **0.401**  **±0.204** | **0.258**  **±0.167** | **0.116**  **±0.105** | 0.023  ±0.035 |
| Ours | lr: 0.001 | 0.782  ±0.172 | 0.742  ±0.184 | 0.683  ±0.198 | 0.608  ±0.210 | 0.511  ±0.214 | 0.388  ±0.203 | 0.250  ±0.167 | 0.114  ±0.105 | **0.023**  **±0.035** |
| Ours | lr: 0.0005 | 0.784  ±0.172 | 0.744  ±0.185 | 0.686  ±0.197 | 0.610  ±0.203 | 0.510  ±0.204 | 0.382  ±0.189 | 0.236  ±0.150 | 0.099  ±0.091 | 0.018  ±0.031 |
| Ours | lr: 0.0001 | 0.766  ±0.181 | 0.724  ±0.194 | 0.663  ±0.206 | 0.587  ±0.214 | 0.487  ±0.215 | 0.362  ±0.199 | 0.223  ±0.156 | 0.095  ±0.090 | 0.016  ±0.028 |
| SD Fluo | prob: 0.5, nms: 0.2 | 0.049  ±0.072 | 0.029  ±0.046 | 0.016  ±0.029 | 0.009  ±0.019 | 0.004  ±0.012 | 0.002  ±0.007 | 0.000  ±0.003 | 0.000  ±0.001 | 0.000  ±0.000 |
| SD Fluo | prob: 0.5, nms: 0.4 | 0.049  ±0.072 | 0.029  ±0.046 | 0.016  ±0.029 | 0.009  ±0.019 | 0.004  ±0.012 | 0.002  ±0.007 | 0.000  ±0.003 | 0.000  ±0.001 | 0.000  ±0.000 |
| SD Fluo | prob: 0.5, nms: def | 0.049  ±0.072 | 0.029  ±0.046 | 0.016  ±0.029 | 0.009  ±0.019 | 0.004  ±0.012 | 0.002  ±0.007 | 0.000  ±0.003 | 0.000  ±0.001 | 0.000  ±0.000 |
| SD Fluo | prob: 0.8, nms: 0.2 | 0.030  ±0.066 | 0.016  ±0.044 | 0.008  ±0.028 | 0.004  ±0.020 | 0.002  ±0.013 | 0.001  ±0.007 | 0.000  ±0.003 | 0.000  ±0.000 | 0.000  ±0.000 |
| SD Fluo | prob: 0.8, nms: 0.4 | 0.030  ±0.066 | 0.016  ±0.044 | 0.008  ±0.028 | 0.004  ±0.020 | 0.002  ±0.013 | 0.001  ±0.007 | 0.000  ±0.003 | 0.000  ±0.000 | 0.000  ±0.000 |
| SD Fluo | prob: 0.8, nms: def | 0.030  ±0.066 | 0.016  ±0.044 | 0.008  ±0.028 | 0.004  ±0.020 | 0.002  ±0.013 | 0.001  ±0.007 | 0.000  ±0.003 | 0.000  ±0.000 | 0.000  ±0.000 |
| SD Fluo | prob: def, nms: 0.2 | 0.050  ±0.072 | 0.029  ±0.046 | 0.016  ±0.029 | 0.009  ±0.019 | 0.004  ±0.012 | 0.002  ±0.007 | 0.001  ±0.003 | 0.000  ±0.001 | 0.000  ±0.000 |
| SD Fluo | prob: def, nms: 0.4 | 0.049  ±0.072 | 0.029  ±0.046 | 0.016  ±0.029 | 0.009  ±0.019 | 0.004  ±0.012 | 0.002  ±0.007 | 0.001  ±0.003 | 0.000  ±0.001 | 0.000  ±0.000 |
| SD Fluo | prob: def, nms: def | 0.050  ±0.072 | 0.029  ±0.046 | 0.016  ±0.029 | 0.009  ±0.019 | 0.004  ±0.012 | 0.002  ±0.007 | 0.001  ±0.003 | 0.000  ±0.001 | 0.000  ±0.000 |
| SD He | prob: 0.5, nms: 0.2 | 0.012  ±0.027 | 0.007  ±0.018 | 0.004  ±0.012 | 0.002  ±0.007 | 0.001  ±0.004 | 0.000  ±0.003 | 0.000  ±0.002 | 0.000  ±0.001 | 0.000  ±0.000 |
| SD He | prob: 0.5, nms: 0.4 | 0.012  ±0.027 | 0.007  ±0.018 | 0.004  ±0.012 | 0.002  ±0.007 | 0.001  ±0.004 | 0.000  ±0.003 | 0.000  ±0.001 | 0.000  ±0.001 | 0.000  ±0.000 |
| SD He | prob: 0.5, nms: def | 0.012  ±0.027 | 0.007  ±0.018 | 0.004  ±0.012 | 0.002  ±0.007 | 0.001  ±0.004 | 0.000  ±0.003 | 0.000  ±0.001 | 0.000  ±0.001 | 0.000  ±0.000 |
| SD He | prob: 0.8, nms: 0.2 | 0.005  ±0.018 | 0.003  ±0.011 | 0.002  ±0.009 | 0.001  ±0.005 | 0.000  ±0.002 | 0.000  ±0.001 | 0.000  ±0.000 | 0.000  ±0.000 | 0.000  ±0.000 |
| SD He | prob: 0.8, nms: 0.4 | 0.005  ±0.018 | 0.003  ±0.011 | 0.002  ±0.009 | 0.001  ±0.005 | 0.000  ±0.002 | 0.000  ±0.001 | 0.000  ±0.000 | 0.000  ±0.000 | 0.000  ±0.000 |
| SD He | prob: 0.8, nms: def | 0.005  ±0.018 | 0.003  ±0.011 | 0.002  ±0.009 | 0.001  ±0.005 | 0.000  ±0.002 | 0.000  ±0.001 | 0.000  ±0.000 | 0.000  ±0.000 | 0.000  ±0.000 |
| SD He | prob: def, nms: 0.2 | 0.009  ±0.024 | 0.005  ±0.016 | 0.003  ±0.011 | 0.001  ±0.006 | 0.001  ±0.004 | 0.000  ±0.002 | 0.000  ±0.001 | 0.000  ±0.001 | 0.000  ±0.000 |
| SD He | prob: def, nms: 0.4 | 0.009  ±0.024 | 0.005  ±0.016 | 0.003  ±0.011 | 0.001  ±0.006 | 0.001  ±0.004 | 0.000  ±0.002 | 0.000  ±0.001 | 0.000  ±0.001 | 0.000  ±0.000 |
| SD He | prob: def, nms: def | 0.009  ±0.024 | 0.005  ±0.016 | 0.003  ±0.011 | 0.001  ±0.006 | 0.001  ±0.004 | 0.000  ±0.002 | 0.000  ±0.001 | 0.000  ±0.001 | 0.000  ±0.000 |
| CP nuclei | dia: 17, flow: 0.2 | 0.080  ±0.111 | 0.052  ±0.080 | 0.032  ±0.056 | 0.019  ±0.040 | 0.010  ±0.026 | 0.005  ±0.015 | 0.002  ±0.009 | 0.001  ±0.004 | 0.000  ±0.001 |
| CP nuclei | dia: 17, flow: 0.4 | 0.096  ±0.112 | 0.063  ±0.078 | 0.038  ±0.053 | 0.021  ±0.035 | 0.011  ±0.022 | 0.005  ±0.013 | 0.002  ±0.008 | 0.001  ±0.004 | 0.000  ±0.001 |
| CP nuclei | dia: 17, flow: 0.6 | 0.099  ±0.111 | 0.064  ±0.077 | 0.038  ±0.051 | 0.021  ±0.033 | 0.010  ±0.020 | 0.004  ±0.011 | 0.002  ±0.007 | 0.000  ±0.003 | 0.000  ±0.001 |
| CP nuclei | dia: 30, flow: 0.2 | 0.085  ±0.121 | 0.055  ±0.085 | 0.032  ±0.055 | 0.019  ±0.039 | 0.011  ±0.027 | 0.006  ±0.017 | 0.003  ±0.011 | 0.001  ±0.006 | 0.000  ±0.002 |
| CP nuclei | dia: 30, flow: 0.4 | 0.120  ±0.117 | 0.082  ±0.085 | 0.051  ±0.060 | 0.032  ±0.044 | 0.019  ±0.031 | 0.009  ±0.019 | 0.004  ±0.011 | 0.001  ±0.005 | 0.000  ±0.002 |
| CP nuclei | dia: 30, flow: 0.6 | 0.128  ±0.116 | 0.086  ±0.085 | 0.054  ±0.060 | 0.032  ±0.042 | 0.018  ±0.028 | 0.008  ±0.017 | 0.003  ±0.009 | 0.001  ±0.004 | 0.000  ±0.001 |
| CP nuclei | dia: 40, flow: 0.2 | 0.067  ±0.128 | 0.041  ±0.088 | 0.021  ±0.057 | 0.011  ±0.038 | 0.006  ±0.025 | 0.003  ±0.015 | 0.001  ±0.009 | 0.000  ±0.004 | 0.000  ±0.002 |
| CP nuclei | dia: 40, flow: 0.4 | 0.101  ±0.123 | 0.064  ±0.087 | 0.037  ±0.060 | 0.021  ±0.040 | 0.011  ±0.027 | 0.005  ±0.016 | 0.002  ±0.009 | 0.000  ±0.004 | 0.000  ±0.001 |
| CP nuclei | dia: 40, flow: 0.6 | 0.114  ±0.119 | 0.073  ±0.085 | 0.042  ±0.059 | 0.023  ±0.039 | 0.012  ±0.024 | 0.005  ±0.013 | 0.002  ±0.007 | 0.000  ±0.003 | 0.000  ±0.001 |
| CP yeast BF | dia: 17, flow: 0.2 | 0.034  ±0.078 | 0.021  ±0.054 | 0.012  ±0.035 | 0.007  ±0.021 | 0.003  ±0.013 | 0.001  ±0.007 | 0.001  ±0.004 | 0.000  ±0.002 | 0.000  ±0.000 |
| CP yeast BF | dia: 17, flow: 0.4 | 0.042  ±0.078 | 0.025  ±0.053 | 0.014  ±0.033 | 0.007  ±0.020 | 0.003  ±0.012 | 0.001  ±0.006 | 0.000  ±0.004 | 0.000  ±0.002 | 0.000  ±0.000 |
| CP yeast BF | dia: 17, flow: 0.6 | 0.040  ±0.076 | 0.024  ±0.051 | 0.013  ±0.032 | 0.007  ±0.019 | 0.003  ±0.011 | 0.001  ±0.006 | 0.000  ±0.003 | 0.000  ±0.002 | 0.000  ±0.000 |
| CP yeast BF | dia: 30, flow: 0.2 | 0.048  ±0.099 | 0.031  ±0.072 | 0.019  ±0.048 | 0.011  ±0.029 | 0.005  ±0.015 | 0.002  ±0.009 | 0.001  ±0.005 | 0.000  ±0.002 | 0.000  ±0.000 |
| CP yeast BF | dia: 30, flow: 0.4 | 0.053  ±0.098 | 0.034  ±0.071 | 0.020  ±0.047 | 0.011  ±0.028 | 0.005  ±0.015 | 0.002  ±0.008 | 0.001  ±0.005 | 0.000  ±0.002 | 0.000  ±0.000 |
| CP yeast BF | dia: 30, flow: 0.6 | 0.053  ±0.096 | 0.034  ±0.070 | 0.020  ±0.046 | 0.011  ±0.028 | 0.005  ±0.014 | 0.002  ±0.008 | 0.001  ±0.005 | 0.000  ±0.002 | 0.000  ±0.000 |
| CP yeast BF | dia: 40, flow: 0.2 | 0.057  ±0.106 | 0.037  ±0.078 | 0.023  ±0.055 | 0.014  ±0.037 | 0.008  ±0.023 | 0.004  ±0.015 | 0.002  ±0.009 | 0.000  ±0.004 | 0.000  ±0.002 |
| CP yeast BF | dia: 40, flow: 0.4 | 0.066  ±0.109 | 0.043  ±0.080 | 0.027  ±0.057 | 0.016  ±0.038 | 0.008  ±0.023 | 0.004  ±0.015 | 0.002  ±0.008 | 0.000  ±0.003 | 0.000  ±0.002 |
| CP yeast BF | dia: 40, flow: 0.6 | 0.068  ±0.107 | 0.044  ±0.079 | 0.027  ±0.056 | 0.016  ±0.038 | 0.008  ±0.023 | 0.004  ±0.014 | 0.002  ±0.008 | 0.000  ±0.003 | 0.000  ±0.002 |