|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 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 | 0.835  ±0.146 | 0.809  ±0.158 | 0.767  ±0.174 | 0.707  ±0.191 | 0.625  ±0.208 | 0.507  ±0.218 | 0.355  ±0.205 | 0.177  ±0.153 | 0.037  ±0.061 |
| Ours | lr: 0.001 | 0.836  ±0.146 | 0.809  ±0.158 | 0.767  ±0.174 | 0.711  ±0.191 | 0.627  ±0.208 | 0.507  ±0.217 | 0.350  ±0.197 | 0.167  ±0.141 | 0.034  ±0.053 |
| Ours | lr: 0.0005 | 0.828  ±0.155 | 0.800  ±0.168 | 0.756  ±0.183 | 0.697  ±0.199 | 0.611  ±0.213 | 0.491  ±0.219 | 0.338  ±0.199 | 0.165  ±0.141 | 0.034  ±0.055 |
| Ours | lr: 0.0001 | 0.827  ±0.159 | 0.797  ±0.174 | 0.752  ±0.191 | 0.690  ±0.209 | 0.603  ±0.224 | 0.484  ±0.229 | 0.332  ±0.207 | 0.162  ±0.145 | 0.033  ±0.053 |
| Ours | lr: 0.005 | 0.836  ±0.144 | 0.809  ±0.158 | 0.768  ±0.173 | 0.711  ±0.189 | 0.628  ±0.206 | 0.508  ±0.213 | 0.350  ±0.197 | 0.169  ±0.140 | 0.034  ±0.054 |
| Ours | lr: 0.001 | 0.835  ±0.152 | 0.808  ±0.166 | 0.765  ±0.183 | 0.707  ±0.201 | 0.624  ±0.217 | 0.506  ±0.225 | 0.352  ±0.209 | 0.174  ±0.154 | 0.037  ±0.061 |
| Ours | lr: 0.0005 | 0.831  ±0.151 | 0.803  ±0.163 | 0.759  ±0.179 | 0.699  ±0.196 | 0.611  ±0.214 | 0.491  ±0.222 | 0.336  ±0.201 | 0.162  ±0.142 | 0.033  ±0.054 |
| Ours | lr: 0.0001 | 0.826  ±0.155 | 0.796  ±0.171 | 0.752  ±0.189 | 0.691  ±0.206 | 0.608  ±0.219 | 0.490  ±0.225 | 0.335  ±0.201 | 0.160  ±0.138 | 0.032  ±0.051 |
| Ours | lr: 0.005 | **0.839**  **±0.148** | **0.814**  **±0.160** | **0.773**  **±0.178** | **0.717**  **±0.196** | **0.637**  **±0.214** | **0.523**  **±0.224** | **0.371**  **±0.208** | **0.188**  **±0.155** | 0.042  ±0.062 |
| Ours | lr: 0.001 | 0.838  ±0.147 | 0.810  ±0.161 | 0.767  ±0.178 | 0.709  ±0.197 | 0.627  ±0.215 | 0.511  ±0.225 | 0.361  ±0.211 | 0.184  ±0.157 | **0.042**  **±0.062** |
| Ours | lr: 0.0005 | 0.838  ±0.149 | 0.811  ±0.163 | 0.769  ±0.179 | 0.712  ±0.194 | 0.628  ±0.207 | 0.508  ±0.212 | 0.348  ±0.193 | 0.164  ±0.138 | 0.033  ±0.055 |
| Ours | lr: 0.0001 | 0.825  ±0.160 | 0.796  ±0.173 | 0.751  ±0.190 | 0.691  ±0.205 | 0.604  ±0.220 | 0.484  ±0.226 | 0.329  ±0.203 | 0.157  ±0.139 | 0.030  ±0.051 |
| SD Fluo | prob: 0.5, nms: 0.2 | 0.065  ±0.097 | 0.039  ±0.063 | 0.022  ±0.041 | 0.012  ±0.027 | 0.006  ±0.017 | 0.002  ±0.009 | 0.001  ±0.005 | 0.000  ±0.002 | 0.000  ±0.000 |
| SD Fluo | prob: 0.5, nms: 0.4 | 0.064  ±0.096 | 0.039  ±0.063 | 0.022  ±0.040 | 0.012  ±0.027 | 0.006  ±0.017 | 0.002  ±0.009 | 0.001  ±0.005 | 0.000  ±0.002 | 0.000  ±0.000 |
| SD Fluo | prob: 0.5, nms: def | 0.064  ±0.096 | 0.039  ±0.063 | 0.022  ±0.041 | 0.012  ±0.027 | 0.006  ±0.017 | 0.002  ±0.009 | 0.001  ±0.005 | 0.000  ±0.002 | 0.000  ±0.000 |
| SD Fluo | prob: 0.8, nms: 0.2 | 0.038  ±0.082 | 0.021  ±0.056 | 0.010  ±0.036 | 0.006  ±0.027 | 0.003  ±0.017 | 0.001  ±0.010 | 0.000  ±0.005 | 0.000  ±0.000 | 0.000  ±0.000 |
| SD Fluo | prob: 0.8, nms: 0.4 | 0.038  ±0.082 | 0.021  ±0.056 | 0.010  ±0.036 | 0.006  ±0.027 | 0.003  ±0.017 | 0.001  ±0.010 | 0.000  ±0.005 | 0.000  ±0.000 | 0.000  ±0.000 |
| SD Fluo | prob: 0.8, nms: def | 0.038  ±0.082 | 0.021  ±0.056 | 0.010  ±0.036 | 0.006  ±0.027 | 0.003  ±0.017 | 0.001  ±0.010 | 0.000  ±0.005 | 0.000  ±0.000 | 0.000  ±0.000 |
| SD Fluo | prob: def, nms: 0.2 | 0.065  ±0.097 | 0.040  ±0.064 | 0.022  ±0.041 | 0.013  ±0.027 | 0.006  ±0.017 | 0.003  ±0.009 | 0.001  ±0.005 | 0.000  ±0.002 | 0.000  ±0.000 |
| SD Fluo | prob: def, nms: 0.4 | 0.064  ±0.096 | 0.039  ±0.063 | 0.022  ±0.041 | 0.012  ±0.027 | 0.006  ±0.017 | 0.003  ±0.009 | 0.001  ±0.005 | 0.000  ±0.002 | 0.000  ±0.000 |
| SD Fluo | prob: def, nms: def | 0.065  ±0.096 | 0.040  ±0.063 | 0.022  ±0.041 | 0.013  ±0.027 | 0.006  ±0.017 | 0.003  ±0.009 | 0.001  ±0.005 | 0.000  ±0.002 | 0.000  ±0.000 |
| SD He | prob: 0.5, nms: 0.2 | 0.016  ±0.036 | 0.009  ±0.024 | 0.005  ±0.017 | 0.002  ±0.010 | 0.001  ±0.006 | 0.000  ±0.004 | 0.000  ±0.002 | 0.000  ±0.001 | 0.000  ±0.000 |
| SD He | prob: 0.5, nms: 0.4 | 0.016  ±0.036 | 0.009  ±0.024 | 0.005  ±0.017 | 0.002  ±0.010 | 0.001  ±0.006 | 0.000  ±0.004 | 0.000  ±0.002 | 0.000  ±0.001 | 0.000  ±0.000 |
| SD He | prob: 0.5, nms: def | 0.016  ±0.036 | 0.009  ±0.024 | 0.005  ±0.017 | 0.002  ±0.010 | 0.001  ±0.006 | 0.000  ±0.004 | 0.000  ±0.002 | 0.000  ±0.001 | 0.000  ±0.000 |
| SD He | prob: 0.8, nms: 0.2 | 0.007  ±0.022 | 0.003  ±0.014 | 0.002  ±0.011 | 0.001  ±0.006 | 0.000  ±0.003 | 0.000  ±0.001 | 0.000  ±0.001 | 0.000  ±0.000 | 0.000  ±0.000 |
| SD He | prob: 0.8, nms: 0.4 | 0.007  ±0.022 | 0.003  ±0.014 | 0.002  ±0.011 | 0.001  ±0.006 | 0.000  ±0.003 | 0.000  ±0.001 | 0.000  ±0.001 | 0.000  ±0.000 | 0.000  ±0.000 |
| SD He | prob: 0.8, nms: def | 0.007  ±0.022 | 0.003  ±0.014 | 0.002  ±0.011 | 0.001  ±0.006 | 0.000  ±0.003 | 0.000  ±0.001 | 0.000  ±0.001 | 0.000  ±0.000 | 0.000  ±0.000 |
| SD He | prob: def, nms: 0.2 | 0.013  ±0.032 | 0.007  ±0.021 | 0.004  ±0.015 | 0.002  ±0.008 | 0.001  ±0.005 | 0.000  ±0.003 | 0.000  ±0.002 | 0.000  ±0.001 | 0.000  ±0.000 |
| SD He | prob: def, nms: 0.4 | 0.013  ±0.032 | 0.007  ±0.021 | 0.004  ±0.015 | 0.002  ±0.008 | 0.001  ±0.005 | 0.000  ±0.003 | 0.000  ±0.002 | 0.000  ±0.001 | 0.000  ±0.000 |
| SD He | prob: def, nms: def | 0.013  ±0.032 | 0.007  ±0.024 | 0.004  ±0.015 | 0.002  ±0.008 | 0.001  ±0.005 | 0.000  ±0.003 | 0.000  ±0.002 | 0.000  ±0.001 | 0.000  ±0.000 |
| CP nuclei | dia: 17, flow: 0.2 | 0.097  ±0.132 | 0.066  ±0.096 | 0.040  ±0.068 | 0.024  ±0.049 | 0.013  ±0.033 | 0.006  ±0.020 | 0.003  ±0.012 | 0.001  ±0.005 | 0.000  ±0.001 |
| CP nuclei | dia: 17, flow: 0.4 | 0.122  ±0.141 | 0.082  ±0.101 | 0.050  ±0.069 | 0.028  ±0.047 | 0.014  ±0.030 | 0.007  ±0.018 | 0.003  ±0.011 | 0.001  ±0.005 | 0.000  ±0.002 |
| CP nuclei | dia: 17, flow: 0.6 | 0.130  ±0.145 | 0.087  ±0.105 | 0.053  ±0.072 | 0.029  ±0.047 | 0.014  ±0.028 | 0.006  ±0.016 | 0.002  ±0.010 | 0.001  ±0.005 | 0.000  ±0.002 |
| CP nuclei | dia: 30, flow: 0.2 | 0.109  ±0.153 | 0.072  ±0.112 | 0.042  ±0.074 | 0.024  ±0.052 | 0.014  ±0.037 | 0.008  ±0.024 | 0.004  ±0.015 | 0.001  ±0.007 | 0.000  ±0.002 |
| CP nuclei | dia: 30, flow: 0.4 | 0.153  ±0.149 | 0.106  ±0.110 | 0.067  ±0.076 | 0.041  ±0.056 | 0.024  ±0.038 | 0.012  ±0.024 | 0.005  ±0.014 | 0.001  ±0.006 | 0.000  ±0.002 |
| CP nuclei | dia: 30, flow: 0.6 | 0.165  ±0.149 | 0.115  ±0.112 | 0.072  ±0.079 | 0.043  ±0.057 | 0.024  ±0.038 | 0.011  ±0.023 | 0.004  ±0.012 | 0.001  ±0.005 | 0.000  ±0.001 |
| CP nuclei | dia: 40, flow: 0.2 | 0.088  ±0.162 | 0.056  ±0.118 | 0.031  ±0.081 | 0.016  ±0.056 | 0.009  ±0.039 | 0.005  ±0.024 | 0.002  ±0.014 | 0.001  ±0.007 | 0.000  ±0.003 |
| CP nuclei | dia: 40, flow: 0.4 | 0.129  ±0.156 | 0.085  ±0.114 | 0.050  ±0.079 | 0.028  ±0.054 | 0.015  ±0.037 | 0.007  ±0.022 | 0.003  ±0.012 | 0.001  ±0.005 | 0.000  ±0.002 |
| CP nuclei | dia: 40, flow: 0.6 | 0.150  ±0.153 | 0.099  ±0.113 | 0.059  ±0.079 | 0.033  ±0.053 | 0.016  ±0.033 | 0.007  ±0.018 | 0.002  ±0.010 | 0.000  ±0.004 | 0.000  ±0.001 |
| CP yeast BF | dia: 17, flow: 0.2 | 0.045  ±0.104 | 0.030  ±0.076 | 0.018  ±0.051 | 0.010  ±0.032 | 0.005  ±0.020 | 0.002  ±0.010 | 0.001  ±0.006 | 0.000  ±0.003 | 0.000  ±0.001 |
| CP yeast BF | dia: 17, flow: 0.4 | 0.057  ±0.106 | 0.036  ±0.077 | 0.020  ±0.051 | 0.011  ±0.033 | 0.005  ±0.019 | 0.002  ±0.010 | 0.001  ±0.006 | 0.000  ±0.003 | 0.000  ±0.001 |
| CP yeast BF | dia: 17, flow: 0.6 | 0.056  ±0.105 | 0.035  ±0.076 | 0.020  ±0.050 | 0.011  ±0.032 | 0.005  ±0.019 | 0.002  ±0.010 | 0.001  ±0.006 | 0.000  ±0.002 | 0.000  ±0.001 |
| CP yeast BF | dia: 30, flow: 0.2 | 0.068  ±0.133 | 0.046  ±0.103 | 0.029  ±0.072 | 0.017  ±0.047 | 0.008  ±0.025 | 0.003  ±0.015 | 0.001  ±0.008 | 0.000  ±0.004 | 0.000  ±0.000 |
| CP yeast BF | dia: 30, flow: 0.4 | 0.075  ±0.132 | 0.050  ±0.102 | 0.030  ±0.071 | 0.017  ±0.046 | 0.008  ±0.025 | 0.003  ±0.014 | 0.001  ±0.008 | 0.000  ±0.004 | 0.000  ±0.000 |
| CP yeast BF | dia: 30, flow: 0.6 | 0.076  ±0.130 | 0.050  ±0.100 | 0.030  ±0.070 | 0.017  ±0.045 | 0.008  ±0.024 | 0.003  ±0.014 | 0.001  ±0.008 | 0.000  ±0.004 | 0.000  ±0.000 |
| CP yeast BF | dia: 40, flow: 0.2 | 0.079  ±0.136 | 0.053  ±0.105 | 0.035  ±0.078 | 0.021  ±0.056 | 0.012  ±0.035 | 0.006  ±0.023 | 0.003  ±0.014 | 0.001  ±0.006 | 0.000  ±0.003 |
| CP yeast BF | dia: 40, flow: 0.4 | 0.091  ±0.142 | 0.062  ±0.110 | 0.040  ±0.083 | 0.024  ±0.059 | 0.013  ±0.037 | 0.007  ±0.023 | 0.003  ±0.013 | 0.001  ±0.006 | 0.000  ±0.003 |
| CP yeast BF | dia: 40, flow: 0.6 | 0.095  ±0.142 | 0.064  ±0.110 | 0.041  ±0.082 | 0.025  ±0.059 | 0.013  ±0.036 | 0.007  ±0.023 | 0.003  ±0.013 | 0.001  ±0.006 | 0.000  ±0.003 |