## Scaling with $N$

**Effective $J$** — plot of $J_{eff}/J$ versus $N$

Legend:
- $U = 0.40$
- $U = 0.35$
- $U = 0.30$
- $U = 0.25$
- $U = 0.20$
- $U = 0.15$
- $U = 0.10$
- $U = 0.05$
- $U = 0.00$

**Effective $U$** — plot of $U_{eff}/J$ versus $N$

**Error after $t = N/(4J)$** — plot of error versus $N$

Legend:
- Max
- Mean