Erdős-Rényi b а C n = 60Approximation factor 1.0 LV 10^{-1} 0.6 10^{-2} **CLV** 10^{-3} Frequency 0.9 10^{-4} **MDG RPP** 12 16 20 24 0.8 0.2 Luby Uniform Blelloch 0.7 0.0 12 16 0.0 0.2 8.0 20 24 0.4 0.6 |S| р d f e $p = \log(n)/n, \langle k \rangle \approx \log(n)$ $p = \log(n)/n, \langle k \rangle \approx \log(n)$ $p = \log(n)/n, \langle k \rangle \approx \log(n)$ 0.8 1.00 1.00 Approximation factor 0.7 Percentage MIS 0.75 0.95 Worst-case 0.6 0.50 0.90 0.5 0.4 0.25 0.85 0.3 0.00 0.80 Ó 200 150 100 150 200 50 100 150 50 100 50 0 200 Size (n) Size (n) Size (n) h g p = 1/2, $\langle k \rangle \approx n/2$ $p = 1/2, \langle k \rangle \approx n/2$ p = 1/2, $\langle k \rangle \approx n/2$ 0.7 1.00 1.00 Approximation factor 0.6 Percentage MIS 0.75 0.90 Worst-case 0.5 0.50 0.80 0.4 0.25 0.3 0.70 0.2 0.00 0.60

150

200

100

Size (n)

50

0

100

Size (n)

50

150

200

0

50

150

200

100

Size (n)