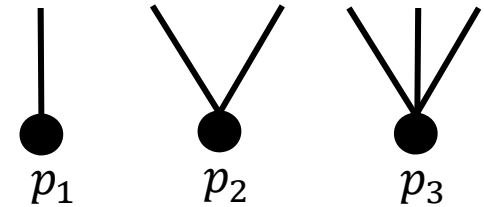


$$\phi_c = \frac{\langle k \rangle}{\langle k^2 \rangle - \langle k \rangle}$$

## Quiz 14



- Consider a configuration model network that has vertices of degree 1, 2, and 3 only, in fractions  $p_1$ ,  $p_2$ , and  $p_3$ , respectively
- Find the value of the critical vertex occupation probability  $\phi_c$  at which site percolation take place
- Show that there is no giant cluster for any value of the occupation probability  $\phi$  if  $p_1 > 3p_3$ . Why does this result not depend on  $p_2$  ?
- Please explain why your friends have more friends than you do.
- Submit from Tokyo Tech OCW-i
- Deadline: ??:??(Japan Standard Time) on Feb. 6(Wed)
- Files should be MS Word, PDF or Zipped Jupyter notebook