Maekawa's Voting Sets

- Each process P*i* is associated with a *voting set* V*i* (of processes)
- Each process belongs to its own voting set
- *The intersection of any two voting sets must be non-empty*
  - *Same concept as Quorums!*
- Each voting set is of size *K*
- Each process belongs to *M* other voting sets
- Maekawa showed that $K=M=\sqrt{N}$ works best
- One way of doing this is to put N processes in a $\sqrt{N}$ by $\sqrt{N}$ matrix and for each P*i*, its voting set V*i* = row containing P*i* + column containing P*i*. Size of voting set = $2*\sqrt{N}-1$