

Causal vs. FIFO

- Causal Ordering \Rightarrow FIFO Ordering
- Why?
 - If two multicasts M and M' are sent by the same process P , and M was sent before M' , then $M \rightarrow M'$
 - Then a multicast protocol that implements causal ordering will obey FIFO ordering since $M \rightarrow M'$
- Reverse is not true! FIFO ordering does not imply causal ordering.