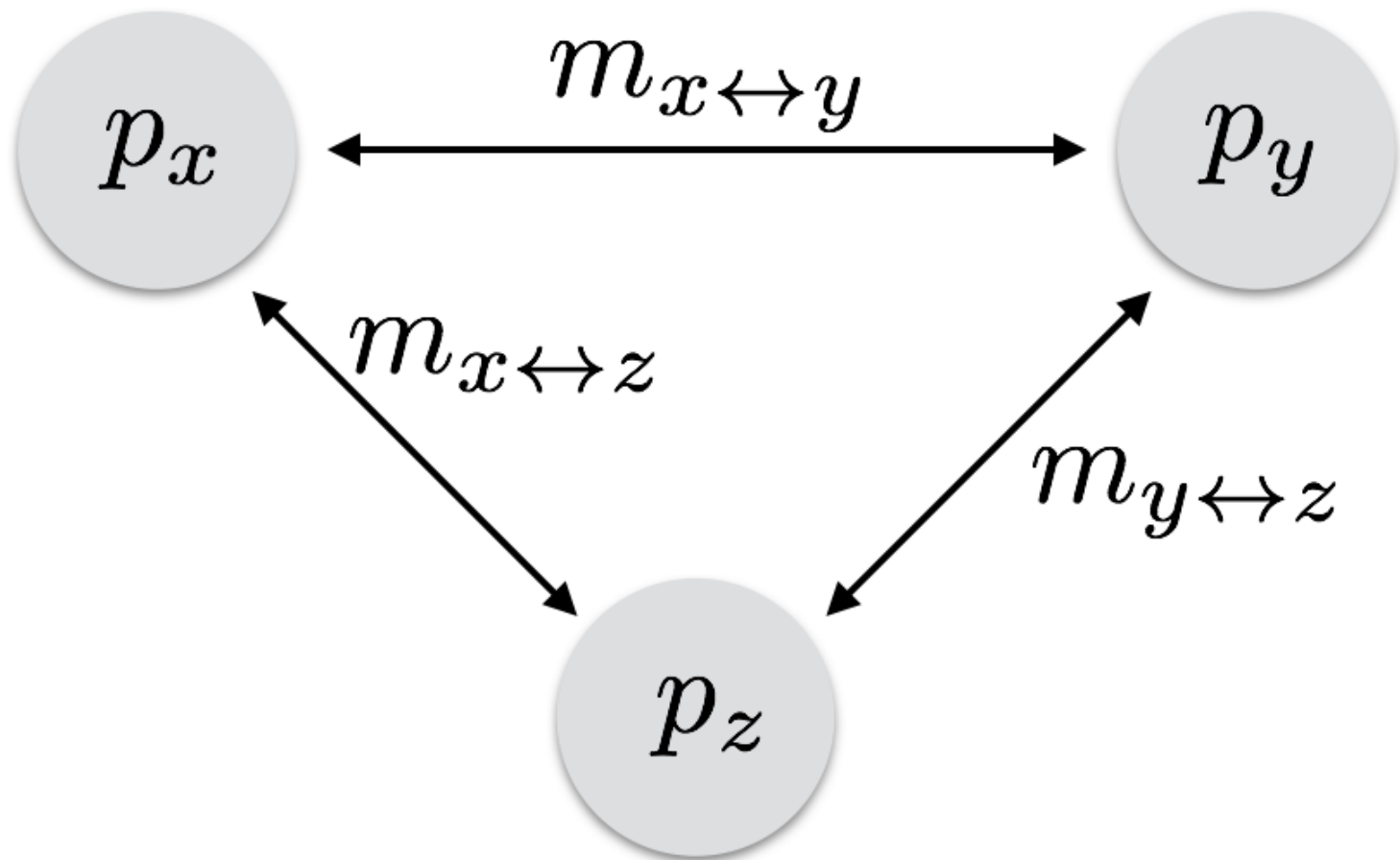


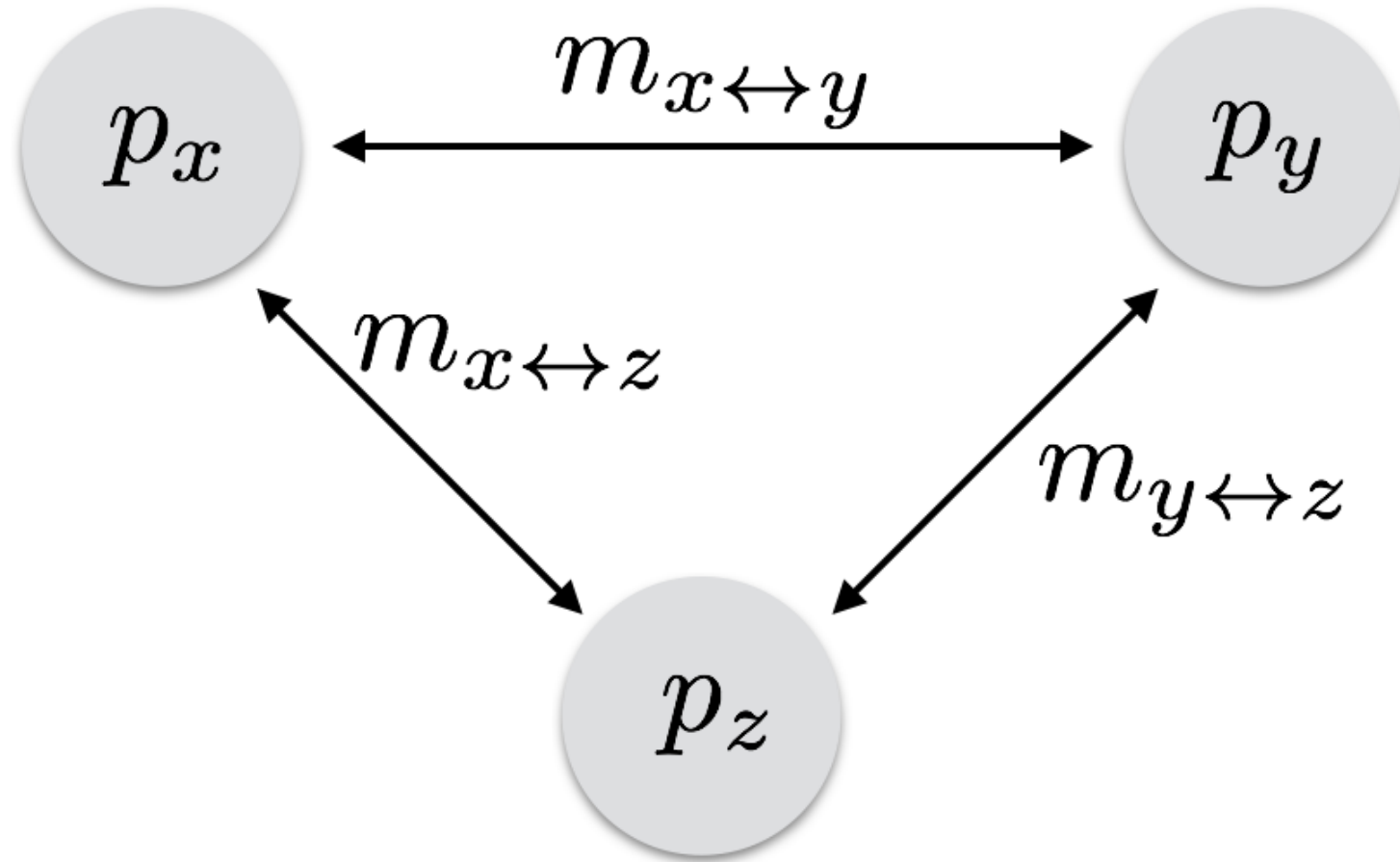


$$P_{x,t+1} = n_{x \leftrightarrow y} P_{y,t} + n_{x \leftrightarrow z} P_{z,t} + [1 - (n_{x \leftrightarrow y} + n_{x \leftrightarrow z})] P_x$$



$$P_{y,t+1} = n_{x \leftrightarrow y} P_{x,t} + n_{y \leftrightarrow z} P_{z,t} + [1 - (n_{x \leftrightarrow y} + n_{y \leftrightarrow z})] P_y$$

$$P_{z,t+1} = n_{x \leftrightarrow z} P_{x,t} + n_{y \leftrightarrow z} P_{y,t} + [1 - (n_{x \leftrightarrow z} + n_{y \leftrightarrow z})] P_z$$



$$p_{x,t+1} = m_{x \leftrightarrow y} p_{y,t} + m_{x \leftrightarrow z} p_{z,t} + [1 - (m_{x \leftrightarrow y} + m_{x \leftrightarrow z})] p_x$$

$$p_{y,t+1} = m_{x \leftrightarrow y} p_{x,t} + m_{y \leftrightarrow z} p_{z,t} + [1 - (m_{x \leftrightarrow y} + m_{y \leftrightarrow z})] p_y$$

$$p_{z,t+1} = m_{x \leftrightarrow z} p_{x,t} + m_{y \leftrightarrow z} p_{y,t} + [1 - (m_{x \leftrightarrow z} + m_{y \leftrightarrow z})] p_z$$

# Beer-time Puzzle

