Extensive Games

Definition

An extensive game is the same as an extensive game with perfect information and chance moves except we add

- For each player $i \in N$ a partition $\mathcal{I}_i$ of $\{h \in H : P(h) = i\}$ with the property that $A(h) = A(h')$ whenever h and h' are in the same member of the partition. For $I_i \in \mathcal{I}_i$ we denote by $A(I_i)$ the set $A(h)$ and by $P(I_i)$ the player $P(h)$ for any $h \in I_i$. ($\mathcal{I}_i$ is the information partition of player i; a set $I_i \in \mathcal{I}_i$ is an information set of player i.)

Refer to $\{N, H, P, f_c, (\mathcal{I}_i)_{i \in N}\}$ as an extensive game form.