

# Decision Analysis in Reliability

## Games and Decisions in Reliability and Risk SAMSI Workshop

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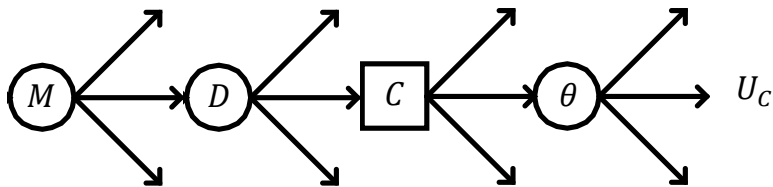








# Manufacturer's Perception of Consumer's Decision Tree



- ▶  $M$  will analyze  $C$ 's decision problem by assuming that he is an expected utility maximizer.
- ▶ Analysis of the tree will be used to estimate  $M$ 's probability of  $C$ 's action in  $M$ 's tree.
- ▶ To achieve this, the  $M$  needs to specify his probability distribution of the  $C$ 's prior of  $\theta$  and  $C$ 's utilities.
- ▶ Once these are specified  $M$ 's probability of  $C$ 's actions are estimated via Monte Carlo simulation.