0 Question: A train is coasting around a large circular track. It is then switched to a smaller circular track. How does its speed change? Assume no friction.

A1: It slows down slightly

A2: Its speed stays exactly unchanged

Arguments for A1

2 Question: Does the train gain rotational energy as it moves to the smaller track?

A1: Yes, slightly

A2: p=70%

3 Question: Is the train's rotational and kinetic energy approximately conserved (any additional energy change is much less than the change in rotational energy)?

A1: Yes

A2: p=70%

5 Question: If the train's rotational and kinetic energy is approximately conserved and the train gains rotational energy slightly as it moves to the smaller track, does the train slow down slightly?

A1: Yes

A2: p=80%

6 Question: Meta-debate: Given the questions and answers in this round, which is the better answer to the question?

A1: It slows down slightly

A2: Its speed stays exactly unchanged

Arguments for A2

1 Question: Does the track ever exert a force that slows the train down?

A1: Yes

A2: 10%

4 Question: Conditioned on 1=No, and no friction, must the speed of the train stay exactly unchanged?

A1:

A2: Yes