

RoboRace Competition

Build and program a Lego Mindstorms robot!
Form 6 teams. Try to get the team sizes as equal as possible.

Construction

Construction time ends at 13.15 on Thursday. You may use Lego pieces in your construction and, if you have time, standard 0-5V sensors + the required circuit to connect them to the RCX. Apart from that no other components/materials may be used in the construction of the robot. The robot may have any shape, but must at the start of a race fit inside a 30 by 30 cm box.

Rules

The races takes place on a raised track. The width of the track varies, and is in some places quite narrow. The edge of the track has a thick black border.

Races are run between two robots. Each robot starts at a randomly determined starting point, and one of the robots has to complete a lap clockwise, while the other need to go counter-clockwise. This means that the robots will have to meet somewhere on the narrow track. If a robot falls off the track it loses the race. If no robot falls off the track the winner is the robot that first completes a lap in the correct direction. The maximum race time is two minutes. If there is no winner after two minutes the race is a draw.

Switching program slot between races is allowed, but not reprogramming. Repairs are allowed between races, but not modifications.

Tournament

The tournament starts right after the end of the construction time and is a round-robin tournament. The winner of the competition is determined in a final between the two highest ranked teams.