Ping Pong Plop

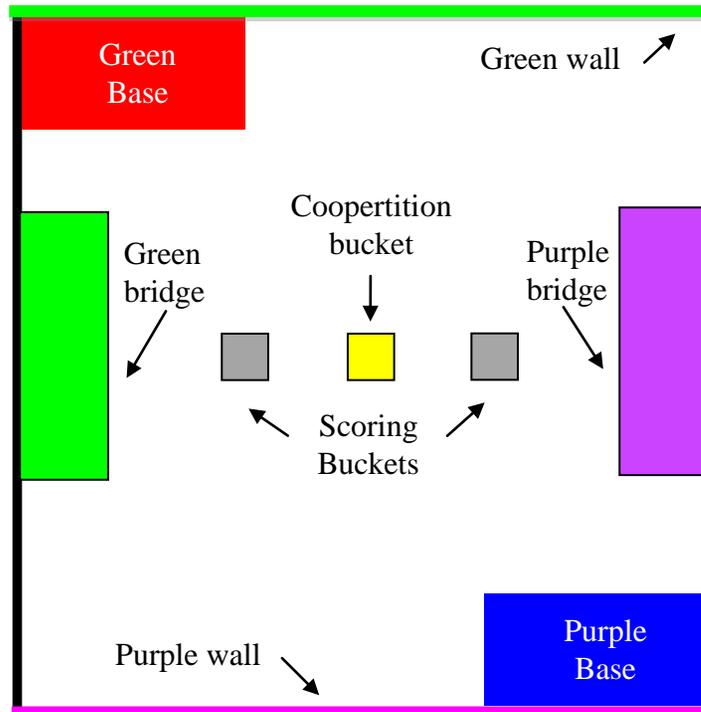Presented by LiveWire Robotics

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Overview:

Two alliances of two robots each play against each other to score the most points in each two and a half minute match. The first 15 seconds of each match is autonomous, the remaining two minutes and fifteen seconds is teleop. Robots try to score ping-pong balls over their opponent's wall and in buckets in the middle of the field. At the end of the match, alliances score points for having one or two robots balanced on their bridge. Robots are awarded seeding points based off win, loss, and Coopertition. Seeding points rank teams for the playoffs.

General Rules:

-Human players may not interact with robots outside of Base.
-Human players may touch robots in Base only if they are making emergency repairs
-Robots must fit into the vertical confines of one square at the beginning of each match; height is not constrained
-Robots may not intentionally harm one another
-Robots may not touch the opposing alliance's bridge or base
-Robots may not move buckets into their base
-Balls may only be introduced into the field via the loading apparatus, onto a robot with all four wheels in Base
-When balls leave the loading apparatus, the first thing they touch must be a robot
-Robots may not intentionally leave parts on the field
-Robots may only possess 15 balls at a time
-The Coopertition bucket is scored as a normal bucket in playoff rounds

Coopertition:

-Coopertition seeding points will be awarded to both alliances if there are at least 10 balls in the Coopertition bucket and at least one ball is from each alliance

Autonomous:

-Robots must begin each match in contact with their own wall
-Each alliance is given 10 balls to pre-load onto their robots
-Robots may perform any actions legal during teleop in autonomous
-Human players may not interact with robots or the loading apparatus during autonomous
-Balls scored in buckets in autonomous will be worth double

Bridges:

-Points are only awarded for bridges if they are balanced at the end of the match
-A robot is balanced on a bridge if all of the following are true:
 -The deck of the bridge is not touching the ground
 -The robot's wheels are entirely supported by the deck of the bridge

Scoring:

-Each ball scored over the opponent's wall is worth 1 point
-Each bucket is worth 10 points; the alliance with more balls in the bucket gets the entirety of those points, no points are awarded for individual balls in buckets
-One robot balanced on a bridge is worth 20 points; two robots balanced on a bridge are worth a total of 40 points.
-Balls in the Coopertition buckets are worth 0 points

Green Base

Green wall

Coopertition bucket

Green bridge

Purple bridge

Scoring Buckets

Purple wall

Purple Base

Seeding Points:

Win: 2

Coopertition : 2

Loss: 0

Tie: 1