## The Open Challenge for the RoboCup 2012 Standard Platform League Competition

## RoboCup SPL Technical Committee

May 25, 2012

The only technical challenge for this year will be the Open Challenge. This challenge is designed to encourage creativity within the Standard Platform League, allowing teams to demonstrate interesting research in the field of autonomous systems. Each team will be given *three minutes* of time on the RoboCup SPL 2012 field to demonstrate their research. Teams *should* also distribute a short, one page description of their research prior to the competitions. The winner will be decided by a vote among the entrants. In particular:

- Teams must describe the content of their demonstration to the technical committee at least *two weeks* before the competitions.
- The demonstration should be strongly related to the scope of the league. Irrelevant demonstrations, such as dancing and debugging tool presentations are discouraged.
- Each team may use any number of Aldebaran Nao robots. Teams must arrange for their own robots.
- Any demonstration deemed likely to require excessive time may be disallowed by the technical committee.
- Teams may use extra objects on the field, as part of their demonstration. Robots other than the Naos may not be used.
- The demonstration must not mark or damage the field. Any demonstration deemed likely to mark or damage the field may be disallowed by the technical committee.
- The demonstration may *not* use any off-board sensors or actuators, or modify the Nao robots.
- The demonstration may use off-board computing power connected over the wireless LAN.
- The demonstration may use off-board human-computer interfaces.

Five minutes will be reserved for each team, *three minutes* of which will be used for the actual challenge. The remaining two minutes will be used for setup and intermediate stoppages if the challenge requires them.

The winner will be decided by a vote among the entrants using a Borda count (http://en.wikipedia.org/wiki/Borda\_count). Each participating team will list their top 10 teams in order (excluding themselves). The teams are encouraged to evaluate the performance based on the following criteria: technical strength, novelty, expected impact and relevance to RoboCup. At a time decided by the designated referee, within 30 minutes of the last demonstration if not otherwise specified, the captain of each team will provide the designated referee with their rankings. Any points awarded by a team to itself will be disregarded. The points awarded by the teams are summed and the team with the highest total score shall be the winner.