Team Leader Meeting 16/06

- The team representatives introduced themselves. The team representatives of the following teams were present: Sweaty, Tsinghua Hephaestus, Bold Hearts, WF Wolves & Hamburg Bit-Bots, I-KID, SYCU-Legendary, NimbRo AdultSize, ZJUDancer, NKFUST, RoboFEI-HT, EDROM, HERoEHS, NUbots, RO:BIT, CIT Brains and Team KIS, Ichiro, MRL-HSL, ITAndroids, AMN United, ZSTT

Competition Venue

- First of all: Thanks to everyone who contributed in setting up the league today, especially Rhoban, who spent the whole day on the fields!
- There is the frosted Window front right next to fields C / D / E. This one is going to remain like it is. We do understand that this poses challenges to the Vision we were not foreseeing, but there is nothing the local organizers can do about it
    - There are also the normal windows next to the Rescue field. We'll try to put separators there that will hopefully block the sun as good as possible
- The margin between the field lines and the field boarder is only 0.6 m and not 0.7 m as written in the rules – again, there is nothing we can do about it.
- The goal posts are not directly straight – we'll attach them to the ground, but that won't fix it entirely. We'll have to live with that
- There won't be any dividers between the fields and according to the rules, there don't have to be any
- Please DO wear shoes on the fields. We've found some leftover staples that might be quite hurtful if you step on them
- We're still missing two goals, all equipment for the Technical Challenges and the equipment for the robot inspection.
- The game controllers are still not set up. We have the routers now which are hidden networks. The SSIDs are HL-A, HL-B,…, HL-E. The computers are set up with the software, but we're missing the switches. So as soon as we have those, we'll test the setup and have them up and running.
    - If you find any bugs in the Game Controller, please report them to the TC as soon as possible
- We'll put up reservation sheets for the fields as soon as they are done
- It might be necessary to improve a couple of the field lines, which we might do later tonight

General Announcements

- No camping on the fields – one robot and one laptop per team member. No hardware building tools, battery chargers, suitcases,…
- Official balls stay on the field at any time. It is a shared resource, so you may not block an official ball for your own testing for too long
- No WiFi access points are allowed at any time - access points will be confiscated by the TC / OC

- Signing the result sheet after the game means you accept the result and that the game was played fair and according to the rules. If you have doubts about that, don't sign the result sheet and come to the Technical Committee to complain.
- Serious participation in *all* Drop-In games your team is scheduled for is mandatory for a team to advance to the quarter finals. The same rules as for forfeit apply.
- Team logos: If you want to have your logo on the Game Controller and it's not already there, please bring it to the OC table on a USB stick or push it to the git repository
- We'll use the pillar next to the OC / TC table as an improvised whiteboard. **Regularly check the this "whiteboard", we will announce everything important there (regularly means about once an hour)**

Referee Duties

- If you are scheduled for a referee duty and no one of your trained referees shows for up for the referee duty: We confiscate all your robot two hours before the next game for one hour.
- We will have a voting for best referee in the end (no one from TC / Exec) – so if you have a good referee in your game, note down their name and make sure you vote for them in the end

Technical Challenges

- There will be a sign-up sheet later today. Please sign-up until tomorrow 5 PM.

"Goal kick from moving ball"
1. The ball is randomly placed by the referee BEFORE the robot has to be placed
2. The robot is placed on the penalty mark. It can be turned in any angle towards the goal
3. The robot may still be connected to the robot until the trial starts. Once the referee blows the whistle and the trial starts, the cable has to be disconnected
4. The teams may press ONE generic start button after the trial has started

High Jump
- The device will be 60 x 60 cm large (even though the rules state 40 x 40)
- We'll attach artificial grass to it

High Kick
- Here as well the ball is placed before the robot is placed.

Game Schedule and Group Drawings

- Ludovic presented the schedule and new drawing schema for this year
- We drew the groups for regular games in Kid, Teen and Adult
- Drop-In groups stay as announced (we'll print the schedule later today)

Schedule 17/06

- Welcome Ceremony
- Robot Inspection: There is going to be a sign-up sheet again. We don't know when we have the devices ready, so we'll put up the sign-up sheet as soon as they're available
    - Be ready for the robot inspection at 9 AM
    - We need volunteers to help with the robot inspection
- Team leader meeting 6 PM
- Referee training right after the opening ceremony (probably 8 PM)

Questions

- Will there be security in the competition hall so equipment can be left in the venue over night?
    - There will be security, but we are not sure that the registration will be open tomorrow morning. So maybe everyone will be let in again. Also, we there might be construction work happening at night. So don't leave anything that is easily grabbable and interesting to the general public
- There was a question how the new rule of the team markers is applied. The Technical Committee announces that later tonight.

Team Leader Meeting 17/06

- Jacky opens the meeting by thanking everyone again who helped with the setup of the league and equipment
- Reinhard introduces the new team. He stresses how important it is that they are well integrated into the league and everyone helps them out.

Report from the Exec <-> Trustee Meeting

- Jacky presented the major development of the Humanoid League. It was reasonably well perceived by the Trustees
- We also talked about the roadmap and the importance of having the roadmap. There will be more discussion amongst the teams, with the trustees and other researchers at IROS. The goal is to identify scientific challenges and then to develop the rules so that they encourage research on that scientific focus points
- Among all the reports by teams, the Trustees were most interested in the Humanoid League
- The competition hall is supposed to be open longer in order to make up for the lost set-up time
- There is a security officer very concerned about the lithium batteries
  - There are yellow fire extinguishers around that are made for the metal fire
  - Keep calm in case of an incident!
- Have an eye on the batteries when you charge them. Preferable charge them on non-burnable surface
- At night the power may stay switch on, but do NOT charge your batteries over night!

General Announcements

- Be aware that your team might need to referee at the same time as you are playing. This is unfortunate, but unavoidable
- Remember that your referee duty starts an hour before the game
- Only one robot handler per drop-in teams is allowed this year – agree on the person being robot handler beforehand and make sure that this person is trained in handling all the robots
- Do not leave garbage in the public area (like team tables, for example). From tomorrow on we'll have visitors and we do not want to make a bad impression
- Game against TC / Exec

Election of new TC and OC

- A new TC and OC must be elected for the RoboCup 2019 in Sydney
- The Organization Committee (OC) is responsible for organizing the league before the event and handle the upcoming tasks during the competition. You should be coming to the next RoboCup

when you want to be in this committee. The committee is elected as a group, so everyone who wants to join is welcome.

- The Technical Committee (TC) works on the rule development of the league and is responsible for the application process. Reinhard, Jacky, Soroush and Maike are in the Executive Committee and are thus going to be part of the Committee for next year. Therefore, there are four more spots on the TC available for next year.
- There will be signup sheets on the Whiteboard. Please ask the person you are suggesting before writing their name on the board!

Team Leader Meeting 18/06

Report from the Roadmap meeting with the Trustees

Jacky reported about the meeting between the Executive Committee members of the HL and the trustees. The goal of the meeting was to discuss the roadmap of the humanoid league. Jacky informed the teams that the discussion was heated at times. Feedback from the trustees was that: (a) the trustees favor a focus on scientific issues instead of simple rule development, (b) that the rules of the HL are too complicated, (c) that the HL should try and attract other high-profile researchers to the HL, (d) that the workshop at IROS on the HL roadmap should be used to develop new ideas for research directions through a bottom-up approach.

Furthermore, Jacky reported that the HL agreed to host an open humanoid league – a league with fewer rules and restrictions for new teams.

General Announcements

- If you have buttons on your robot, you may press a button to start and stop the behavior while the robot is picked up. However, if you do more button presses that calibrates the robot or communicates with it in any other way, this must be announced as a service.
- Every team must provide a referee for the Technical Challenges, even though they are not participating in the Technical Challenges. Again, it is mandatory for all people serving as a referee to participate in the referee training. This time, we will check the attendance and your team will be penalized if you are scheduled for refereeing and do not show up. You will not referee a Technical Challenge and a game at the same time. So your regular referee can referee the Technical Challenge as well.
- The schedule for tomorrow is up on the Whiteboard now. Let us know if there are any mistakes.
- The results are also up on the robocuphumanoid website now. Tomorrow, we will try to update the results and schedule on the website more regularly.
- Remember there is the sign-up for the TC and OC nominations. The voting will be tomorrow. If you are on the list for the Technical Committee, please join the team leader meeting tomorrow and introduce yourself.

- Everyone has noticed that we had an incident with a lithium battery today. We'll keep the yellow fire extinguisher on the OC table now. Please be even more careful when handling your batteries.
- Clarification of manual placement of robots: a goal keeper may always be placed manually independent of who has kick-off and who does not. The striker may only be manually positioned if the respective team has kick off. For dropped ball, strikers may only be manually positioned if both teams do not have autonomous positioning
- A1 and B1 are the respective team captains for the drop-in games. They are responsible for assigning numbers to the robots and decide which color to play in.
- The Technical Committee will try to have a separate meeting room which is quieter for the roadmap and rule discussion

Rule Discussion 20/06

If not stated explicitly, all voting results are reported: in favor / against / abstain

1) Foot size: rule clarification

- What is the exact meaning of the convex hull? Is it the contact point(s) touching the ground or does the entire foot need to fit into the convex hull?
- Currently we measure contact points
- **Vote:**
    - **Minimum encapsulating rectangle of the foot (anything below the ankle): 14 (approved)**
    - Contact points: 2
    - Abstain: 0

2) Minimum ratio between width and length of the foot

- Motion is to relax the ratio between width and length (current ratio ≤ 2.5)
- Originally this rule was established to prohibit a ski-like design that would be very beneficial on uneven terrain
- **Vote: Change it so the ratio falls within a range (to be determined by TC): 11 / 1 / 3 - approved**

3) Scoring from the respective half of the field

- Currently the rule says you can only score from the respective half of the field, proposal is to remove that rule
- Motivation: The current rule doesn't encourage the teamplay as initially planned and it might improve the goal keeper's behavior if longer shots are allowed
- **Vote: Remove the rule: 8 / 2 / 3 - approved**

4) Ball in play after moved for 20cm

- The proposal is to change the wording to "visibly moved" because 20cm is an arbitrary length
- Counterargument: Without a fixed threshold it's very difficult to take the decision whether the movement was "visible"
    - Proposal to solve this by enforcing autonomous placement or allowing the manually placed robot only outside the center circle
        - Counterargument: That does not solve the detection problem for the defending robot
    - Proposal: The referee box could give the signal once the referee makes the call that the ball has been "visibly moved"
        - Counterargument: If the human can detect it, the robot should be able to detect it, too
    - Clarification: The 20cm rule only applies to the attacker to score a goal. For the defender, it counts as in play when it was touched according to the current rules
        - Counterargument: It is still relevant for tactical reasons.

- **Vote:**
  - **Change wording to "moved outside the center circle": 8 (approved)**
  - Change wording to "kicked and moved" (FIFA rules): 4
  - Leave as is: 0
  - Abstain: 2

5) Leg Structure

- Add additional constraint to the robot construction, area of the cross section of the thigh should be larger than a certain measure so the robots are more stable in design
  - Counterargument: We should not constrain the design freedom of the teams more
  - Counterargument: Is it the job of the rules to ensure that a robot is stable? Would an unstable design be an unfair advantage for the team?
- **Vote: Change the leg structure: 1 / 13 / 1 (rejected)**

6) Count team markers on the chest as well

- Currently only team markers on arms and legs count towards the total area that needs to be covered.
- Proposal: Define a percentage of the total team marker area which must be placed on the arms and legs, but the remaining team markers may be placed on chest back and front
- Problem: Introduce shirts instead
  - Counterargument: Problem of shirts getting stuck in the motor, fans, buttons
- **Vote:**
  - **Instead of focusing on arms and legs, change the definition of team markers so it defines a total visible area and a minimum area visible from each side in one piece: 11 (approved)**
  - Colored shirt: 1
  - Leave as is: 4
  - Abstain: 0

7) Change the Drop-In Procedure

- Proposal: Have joint teams instead of a randomized drop-in teams. Have a second competition similar to the SPL league in which teams find their own joint teams and can compete in the main competition together
  - Counterargument: Teams can already form joint teams and compete in the regular tournament together
- Proposal: Remove Drop-In challenge altogether.
  - Motivation: Drop-In only wears off robots, the intended communication does not happen
  - Counterargument: The idea of the Drop-In challenge was to encourage game play among teams, make an easier entry for new teams, bring the league closer together
  - Proposal: Match up new teams that can't provide a full team with established teams instead of drop-in challenge

- Proposal: Reduce the number of Drop-In games because it is too much work for all teams and referees
  - Counterargument: A higher number of drop-in games ensures fairness regarding the random drawing of team mates
- Proposal: Seed the Drop-In games instead of drawing randomly
  - Counterargument: That would bias the competition
- **Vote: Keep Drop-In challenge: 10 / 3 / 2 (approved)**
- **Vote:**
  - **Keep repeated random assignment: 8 (approved)**
  - Play multiple games with the same team: 3
  - Abstain: 3
- **Vote:**
  - **Assign teams randomly: 8 (approved)**
  - Seed the teams: 3
  - Abstain: 2

8) Allow maximum of 2 players in Adult-Size

- **Vote: 3 / 1 / 1 (approved)**

9) Technical Challenges

- General feedback:
  - High-kick: Ball should not touch the black wood before the kick, otherwise robots just push the ball up instead of kicking it
  - Use another measuring device in high jump
  - Enforce to land in standing position in high jump
  - Put some obstacle to jump over in high-jump
  - Release of robot inspection data
  - Rethink push-recovery – for very heavy robots this is just too simple. Is there a way to simulate a real push more closely?
- Motion: It is too lenient who is allowed to do the technical challenges. It should be one robot having all the skills and this robot has to play for at least x amount of time in the real tournament
- **Vote: Raise the barrier for robots being allowed in the technical challenges: 3 / 10 / 1 (rejected)**
- **Vote: Limit the number of player substitutions doing the technical challenge: 8 / 3 / 4 (approved)**

10) Significantly increase field size

- **Vote AdultSize: 3 / 2 / 0 (approved)**
- **Vote TeenSize: 0 / 3 / 1 (rejected)**

11) Increase the distance between robot handler and robot (AdultSize only)

- **Vote to remove robot handlers from the field: 1 / 3 / 1 (rejected)**
- **Vote to increase distance between robot handler and robot: 1 / 4 / 0 (rejected)**

12) Number of robot handlers (AdultSize only)

- **Vote: One robot handler per robot: 2 / 1 / 2 (approved)**

13) Substitutions

- Robots that have been substituted may not be re-substituted at a later stage
- **Vote: Allow robots to be substituted back in: 7 / 5 / 2 (approved)**

14) Replace the current throw-in and corner kicks by free kicks

- The positioning of the ball would not change according to the current rules (so it would not be from the side-line or need to be picked up from the side of the field)
- **Vote: Replace throw-ins and corner kicks with free-kicks: 8 / 2 / 0 (approved)**