

Network globe in the program SPTV 2nd edition on 06/06/2009 the matter on the world championship robotics.

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Students São Paulo will represent Brazil in the biggest league in the world of robotics. Their challenge will be to make a robot dance with the group. Thus they spent much time in the last 45 days: working on the construction of motors, sensors and joints of the robot that will represent Brazil in the World Robotics in Austria. He was affectionately named Valeria students, the idea of Mariana.

"Oh because as I was the only girl and type whatever, already have lots of children, could have one more. Then I decided Valeria, which was the name that came to mind," says Mariana Montenegro Terceiros 14 years. Young people are in the ninth year of an elementary school in the capital. On the national stage, won the race sumo robots. Wins that can push the opponent out of the arena.

Now, the last stage of the competition the challenge is to make the robot dance with the team. "The hardest part was Jntar the steps of the robot with the music. To sync between them. This is very difficult," says Ramon Silva de Lima, 13 years.

The most common is the robot is controlled by a remote control, but this is not the case with Valéria. First the students in the computer program instructions: how to move the arm, the pace of walking and how to avoid obstacles. All this information is transferred to the robot by the cable and when it is disconnected, the robot becomes the owner of his actions.

"The way he has to act, to respond to the problems will already have been thought during programming. That is, who is planning already has to imagine all that will happen, so I can make it succeed in the task," says Luis Rogério da Silva, professor of physics.

To achieve this result they not only use the knowledge they have in robotics. Notions of physics, mathematics and computer science also help. "In general, much of the area extas help people at the Constructing because we use very measured, and has since we need to have knowledge of something, as the center of mass, which material is better than the other, it is more difficult to crack things like that," says Raul Dario Tapia, 13 years.

The fight will be against at least 50 foreign teams. Despite the competition bet that with Valéria go far. "Always ahead of the competition we get a little anxious. But it's quiet because we're getting ready enough," says Renato Ferreira Pinto Júnior 14 years.

Some secrets were not disclosed. Students were just a little bit, not to give the game to their opponents. Three thousand students from dozens of countries will contest the finals of the robots in Austria later this month.

[to see the video report click on the link here.](#)

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