

# Koyo High School Physics Club

物理部は、日々さまざまな活動を行っています。  
最近では、以下のような活動を行っています。

## ・ロボットについての研究

WRO Japan 2011 関西大会優勝、全国大会出場。

## ・ロケットガール&ボーイ養成講座に参加

和歌山大学宇宙教育研究所が主催する講座に参加し、ロケットを打ち上げる。

## ・第6回実験力学における先端科学技術に関する国際シンポジウム高校生・高専生ポスター展示発表の部に参加（H23年11月5日 関西空港にて開催）

研究成果を英語ポスターにまとめ発表予定。



WRO Japan決勝大会  
（東京）



ロケットの製作

Experienced Kansai Tournament WRO JAPAN2011

Abstract

We attended Kansai tournament of WRO (World Robot Olympiad) JAPAN2011. One of our teams won the championship.

**1. What's WRO?**  
WRO is an international robot contest of robots that can be controlled by computer programs. We competed with students around the world. We had to program the remote controlled robots. We could try the contest easily because we used robot kits which were on the market. We could also experience scientific technology and communicate with foreign students.

**2. The tournament rules**  
The robots had to sort blocks which were 3 different colors and 2 sizes as fast as possible and correctly in this tournament.  
About 30 teams took part in this tournament in Kansai area. Each team racked their brains and some teams challenged original ways that we couldn't imagine.  
We could take a hint for programs of the robots there.

**3. The process of making the robot**  
Four teams operated sorting in a different ways. For example, we made a robot that flicked blocks and a robot that hanged the blocks on the stick and push out them.  
In order to improve the speed and the accuracy of the made robots, we measured the time and the success rate and made a graph. We repeated trials and errors and could make the robot that could admirably win the championship.  
This time we introduce the robot used in this tournament.

**4. Reflection and future of this tournament and plans toward activity from now on**  
We are going to challenge next stages in the national tournament. Very strong teams that won in other preliminary tournaments also attend and the rules are harder. So the tournament will be hot.  
We made a big mistake when we practiced for the tournament. We made wrong court. What was worse, we noticed it three days before the tournament. Fortunately, we didn't make a mistake often, it will be hard to win in the national tournament.  
To make fewer mistakes, not to mention making a robot which sorts blocks fast and correct, we have to work with cooperative spirit. And we would like to win in the tournament.

Keywords: WRO (World Robot Olympiad) Japan, sorting robots, program.

国際シンポジウム発表