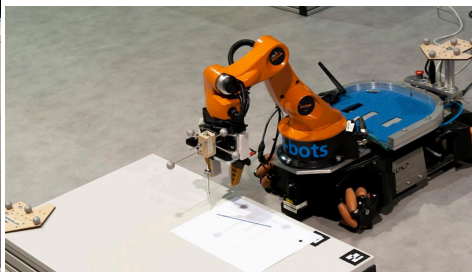
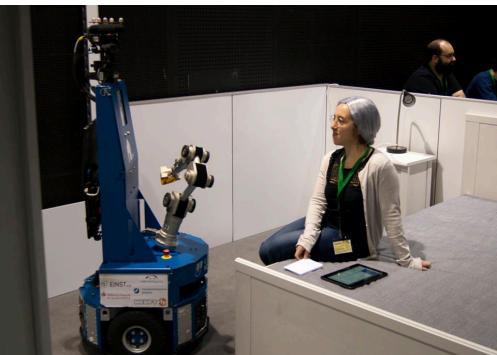


# ABOUT THE ERL and ERL SCORING




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# TBM Scoring Heritage from RoCKIn

- Task scoring is based on three concepts
  - Achievements (A)  states the robot should reach
  - Penalizing behaviors (PB)  things that the robot should not do
  - Disqualifying behaviors (DB)  things that the robot must not do
- Scoring is computed by the following rules
  1. If a disqualifying behaviors occur the robot gets disqualified (i.e., assigned to class 0, the lowest possible performance class)
  2. The performance class of a robot is computed as the number of achievements which have been accomplished
  3. A penalization is assigned to the robot for each penalizing behavior

## ERL: Runs and Trials during Lisbon Spring 2016

- During Local Tournaments more time is available thus TBM will be repeated multiple times
- e.g., IST - Spring 2016 Local Tournament
  - Run #1: 3 trials for each TBM
  - Run #2: 3 trials for each TBM
  - Run #3: 3 trials for each TBM
- Only best trials (up to 5) considered for Local Tournaments scoring, taking their MEDIAN
- ERL final score will be the MEDIAN of the pooled trials from the ones used for scoring the best two Local/Major Tournaments

## ERL: Runs and Trials in General (1)

### Team Score in Tournament A (in a particular TBM/FBM):

Example with 3 runs and 3 trials per run

<b>Run 1</b>	Trial 1	Trial 2	Trial 3
<b>Run 2</b>	Trial 4	Trial 5	Trial 6
<b>Run 3</b>	Trial 7	Trial 8	Trial 9

### Top 5 scores<sup>1</sup>: Trials 1, 2, 6, 8, 9

<sup>1</sup> using the Achievement classes and the Penalties within each class

1. Sort scores of top 5 Trials in descending order
- 2. Score of the team in Tournament A = Median of the sorted score set in 1.**

## ERL: Runs and Trials in General (2)

### Team Score Over an Year (in a particular TBM/FBM):

Example with participation in 3 Tournaments

Tournament	Score	# selected trials
A	6	5
B	4	4
C	8	3

**Year Score of the team** = Median of the sorted pool of 8 trials (5+3) from the two top ranked Tournaments A and C