



## Dance Rules (2013)

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*Note: Changes from 2012 rules are highlighted in red.  
Translated by RoboCupJunior Hong Kong*

### RoboCupJunior Dance Rules 2013

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These are the official rules for RoboCup Junior Dance event 2012. They are released by the RoboCup Junior Dance Technical Committee. These rules have priority over any translations.

這是2012年的RoboCupJunior 舞蹈賽官方守則。由RoboCupJunior舞蹈技術委員會發佈。這些規則優先於任何其他翻譯。

Changes from 2012 rules are highlighted in red. **The rules, score sheets and awards have changed significantly for 2013 so teams should make sure they study the new score sheets.**

紅色部分有別於2012賽規。2013年的賽規、評分表和獎項有顯著改變，因此隊伍應該確保他們了解新的評分表。

### Preface 前言

Robot dance means that one or more robots and humans come together with music and moving in creative harmony. The following dance rules provide a framework on how to structure a human and robot dance performance routine.

機械人舞蹈意思是一個或多個機械人與人伴隨著音樂和走進創造性的和諧。以下的舞蹈規則提供了一個框架，如何組織人類和機械人作舞蹈表演。

**Teams are advised that the main emphasis of this competition is on the technical aspects of the robot design and construction (including sensors and actuators) and the programming that creates the performance. The RoboCupJunior Dance Technical Committee would like to encourage teams to be creative, innovative and take risks in their use of technology and materials to create their performances.**

建議隊伍把比賽的重點放在機械人設計和建構(包括傳感器和促動器)的技術方面和編程上，來創作表演。RoboCupJunior舞蹈技術委員會鼓勵隊伍以創意、革新和願冒險的精神運用他們的技術和材料來創作表演。

## 1. PERFORMANCE 表演

### 1.1. Kind of Performance 表演類型

RoboCup Junior Dance allows teams to create a 1 to 2 minute creative stage performance using autonomous robots that the teams have designed, built and programmed. Teams can choose to create either a Dance or a Theatre performance.

RoboCup Junior舞蹈表演允許隊伍以他們所設計、製作和編寫程式的自主機械人來創作一個1至2分鐘副創意的舞台表演。隊伍選擇創作一個舞蹈或戲劇表演

'Dance' is a performance closely sequenced to music. The robots are required to move in time to the beat or rhythm of the music used, in the same way that a human may listen to the beat of music and dance to it. Dance assessment is closely focused on the choreography and movement of robot(s) with synchronization to music beats.

「舞蹈」是與音樂相扣的表演。機器人需要跟隨音樂拍子和韻律運動，同樣地伴舞者可聽著音樂拍子起舞。舞蹈的評分是非常著重編舞和機械人動作與音樂拍子的同步性。

'Theatre' is a performance in which the robots tell a story or develop a theme supported by music. Theatre assessment is focused on the overall theatrical presentation. The performance will be judged by how effectively the robot(s) are used to present a theatrical theme. **Examples: Nursery rhymes, movie-inspired presentations, sporting theme, sustainability theme, etc.**

「戲劇」作為表演時，在音樂的襯托下以機械人講述故事或發展出一個主題。戲劇的評分是非常著重整體個戲劇的表達。以如何有效地運用機械人表達戲劇主題來評價表演。例如：童謠、具電影啟發的展示，運動主題、可持續發展的主題等。



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The Dance/Theatre performance score sheet can be downloaded from the official RoboCupJunior Website (<http://robocupjunior.org>). Teams are encouraged to refer to the score sheet when preparing their dance or theatre performances.

舞蹈和戲劇計分表可於RoboCupJunior官方網頁(<http://robocupjunior.org>)下載。鼓勵隊伍於舞蹈或戲劇表演採排時使用計分表。

Before a RoboCupJunior event, the team must decide which is the most appropriate performance type so that judges can use the right score sheet to assess the performance. **The following are some guidelines that can help teams to make that decision:**

於RoboCupJunior活動前，隊伍必須決定其表演類型那種最為合適，這樣裁判方可使用正確的評分表以評估表現。以下是一些指導方針，可以幫助團隊做出決定：

**A dance performance will:** 舞蹈表演：

**Use music as an integral part of the performance with deliberate, accurate and synchronized movements to music.**

音樂是經仔細考慮、準確及與舞蹈同步，表演中音樂是主要的部分。

**Use choreography of the robots to music as the focus of the performance.**

表演的焦點是以機器人的舞蹈動作和音樂為主。

**A theatre performance will:** 劇場表演：

**Use movement and music to create a performance that tells a story.**

以動作和音樂來創作表演，講述故事。

**Music is used as background to supplement the performance.**

使用背景音樂襯托表演。

**Use a story as a focus of the performance.**

以故事作為表演的焦點。

Following a stage performance, the judges may suggest a switch in the performance category of Dance or Theatre.

根據舞台表演，裁判團可能會建議更改舞蹈或劇場表演的類別。

### 1.2. Duration 比賽時間

1.2.1. **Each team will have a total of 5 minutes for their presentation.** This time includes stage performance set-up, introduction and the performance, including any re-starts due to factors under the teams' control. It does not include time needed for packing up and clearing the stage.

每隊伍演出總時間為5分鐘。這5分鐘包括了表演舞台設置、介紹及表演環節，也包括任何由隊伍控制因素以致重新開始。清理舞台的時間則不包括在內。

1.2.2. Following each performance, a team must fully tidy up the stage, pack up and remove any objects related to their performance. The performing team has a maximum of one minute to clear the stage after the end of their performance.

**The maximum time onstage is therefore six minutes.**

緊接每個表演，每隊必須完全清理舞台，執拾及移走任何有關他們表演的物品。完成表演後，表演隊伍有最多一分鐘時間清理舞台。因此在舞台上的時間為最多六分鐘。

1.2.3. The duration of a performance routine must be no less than 1 minute and no more than 2 minutes.

表演環節的持續時間不能少於1分鐘及超過2分鐘。



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1.2.4. If a team exceeds the time limits explained in 1.2.1, 1.2.2 and 1.2.3 the team will be penalized by the loss of marks. A judge starts a stopwatch when a team member steps a foot on the stage for the maximum five minute period and following 1 minute to clear the stage. If the time limit is exceeded due to circumstances outside the team's control (for example problems with starting the music by the technicians) there will be no time penalty. The judges have the final say on any time penalties.

如有隊伍因1.2.1、1.2.2和1.2.3中所述而愈時，該隊伍將被處罰遭扣分。當隊員踏上舞台的一刻，裁判便會開始計時，限時5分鐘，接著的1分鐘作清理舞台。如果愈時原因是超出隊伍控制的情況下(如問題緣於技術員開始音樂的時間)，將不會因愈時遭扣分。裁判在處理愈時扣分問題上，擁有最終決定權。

**1.2.5. Teams are strongly encouraged during the setup time to give an introduction that explains the robot technologies they used. Any format is acceptable for this introduction including video, slide-show or a team member talking etc. The introduction must be within the total time allocation for the performance.**

強烈建議隊伍在舞台設置時提供介紹，解釋他們所使用的機械人技術。任何格式的介紹都可接受，包括視頻、放映幻燈片或隊員講述等。介紹必須在分配的表演總時間之內。

### 1.3. Music 音樂

1.3.1. Teams must provide their own audio music source. The preferred transport method is to place the sound file on a memory stick as a MP3 file. The memory stick should be clearly labeled with the team name and category (primary or secondary) and should hold only the MP3 file. It is essential that the music should be given to the RoboCupJunior officials acting as sound technicians before the team's practice period. Teams are encouraged to bring multiple copies of the audio source file.

隊伍必須提供自己的音頻音樂源。首選的傳輸方式是將聲音檔儲存為MP3檔放在記憶棒上。記憶棒應清楚地標有隊名、類別(初級組或高級組)和應存放的MP3檔。於隊伍的採排環節前將音樂交給RoboCupJunior官方的音響技術員非常重要。鼓勵各隊伍帶備多份的音源檔案拷貝。

1.3.2. Teams are strongly encouraged to bring a good quality audio music source file since their evaluation also depends on the music quality.

強烈建議隊伍提供優質的音源檔案，因評分也會關聯到音樂的質量。

1.3.3. The music should start at the beginning of the audio music source with a few seconds of silent lead time.

音樂應該在音頻資料啟動後，經過幾秒無聲的前奏開始。

1.3.4. It is the responsibility of the team to ensure that the music is playing correctly before their first performance by liaising with the RoboCupJunior officials.

RoboCupJunior官方人員通知隊伍作首次表演之前，隊伍是有責任確保音樂可正確地播放。

### 1.4. Human Team Members 隊伍隊員

1.4.1. Human team members are encouraged to perform with their robots. There is no penalty for humans not performing with their robots.

鼓勵隊員和他們的機械人一起表演，但隊員沒有和他們的機械人一起表演是不會遭扣分。

1.4.2. The only physical contact humans may have with their robots is to start the robot(s) at the beginning of a performance.

隊員唯一可身體接觸他們機械人僅限於表演開始時啟動機械人。

1.4.3. When **physical** contact between a human and a robot is a part of the performance this has to be discussed with and approved by the judges BEFORE the performance to ensure all the robotic performance is autonomous.

如人和機器人有身體接觸並屬表演的一部分，需要在表演前跟裁判商量並獲得批准，以確定所有機械人的表演是自動的。

1.4.4. The maximum recommended number of 'human' members allowed on each team is 10; the minimum is 2. Any deviation from these numbers must be referred for adjudication to the Chief Judge before registration.

建議：允許每隊最多10個隊員，最少2個。如偏離該限定人數，必須在註冊前提交給裁判團首長。



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1.4.5. All team members must be the correct ages for the primary and secondary categories as state on the RCJ website <http://rcj.robocup.org/about.html> under "Ages".

所有隊伍成員的年齡都必須在所屬組別中(初級組和高級組)，於RCJ網站<http://rcj.robocup.org/about.html>，“Ages”一項中所述。

### 1.5. Scenery and Presentations 佈景及演示

1.5.1 Teams are encouraged to provide their own scenery.

鼓勵隊伍提供他們自己的佈景

1.5.2 Teams are encouraged to provide a visual or multimedia presentation as part of their performance. This can take the form of a video, animation, slide--show etc. Teams are encouraged to be creative is designing the presentation. Organizers will try their best to provide a projector and a projection screen for teams wishing to incorporate presentation as part of their performance.

鼓勵隊伍提供視覺或多媒體演示作為他們表演的一部分。作其形式可以為視頻、動畫、放映幻燈片等。鼓勵隊伍設計演示時創新。組織單位將盡力提供一個投影儀和投映屏幕給隊伍，希望演示仍作為他們表演的一部分。

1.5.3. A certificate is awarded to the team with the “Best Creative Presentation”. See also 4.6.

證書會頒發給獲“最佳創意演示”的隊伍，見4.6。

1.5.4. Teams should ensure that any presentation is being displayed correctly before their first performance by liaising with the RoboCupJunior officials.

RoboCupJunior官方人員通知隊伍作首次表演之前，隊伍應確保演示正確地顯示。

### 1.6. Performance Routine 表現流程

1.6.1. Each team will perform only one Dance or Theatre performance routine. The same performance routine will be repeated if they proceed to the finals in their division. Some minor modifications /improvements of the performance using the same music may be accepted. Any questions or concerns on performance and robot modifications at the venue should be discussed with the chief judge.

每支隊伍只有一次舞蹈和戲劇表演流程。同一表演流程將會重複，如隊伍進身決賽。使用同一音樂，而對表演內容作部分次要修改/改善可以接受。於會場任何的問題或有關表演及機械人修改，應與首席裁判商量。

1.6.2. A RoboCupJunior official will start the music and the audio visual/multimedia presentation for the routine.

每輪比賽，由一名RoboCupJunior工作人員將播出音樂及視聽/多媒體展示。

1.6.3. One human team member or several members using multiple robots and props can start each robot, either by hand or a remote control.

由一名隊員或幾名隊員(如隊伍使用多個機械人及道具)啟動其機械人，可採取手動或遙控方式啟動。

1.6.4. Teams are strongly encouraged to program their robot to begin the stage performance routine a few seconds after the music starts. As it is extremely difficult to judge precisely when the music will play after the audio source is started. Teams may find it useful to include a “beep” at the beginning of their music as a start signal.

強烈建議各隊伍在音樂播放幾秒鐘以後才啟動其機械人。這是因為很難準確判斷音源播放後音樂何時會響起。隊伍可能發現，在他們的音樂開始處加入“beep”聲作為啟動信號會有幫助。

1.6.5. Depending on the configuration of the dance stage and the sound system at the venue, it is possible that the human starting the robot will not be able to see the RoboCupJunior official starting the audio source and vice versa. Teams should come prepared for these conditions.

基於舞蹈場地的結構，現場環境影響等因素，啟動機械人的隊員和播放音頻資料的RoboCupJunior工作人員可能是相互間看不見對方「動作」的。因此各隊伍必須準備好以適應這些情況。



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### 1.7. Restarts 重新啟動

1.7.1. Teams are allowed to restart their routine if necessary, at the discretion of the officials. Unless a problem is not the fault of the team, any restart will result in a score penalty. There is no limit on the number of restarts a team can perform within their 5 minutes performance time. Team will be asked to leave the stage after 5 minutes.

在工作人員慎重判斷下，如有必要，各隊可重新啟動程序。任何一次的重新啟動將會被扣分，除非問題原因不在於隊伍。5分鐘的表演時間內，隊伍可不限次數的重新啟動程序。5分鐘過後，隊伍將被要求離開舞台。

### 1.8. Security & safety 保安及安全

1.8.1. In order to protect participants, RoboCupJunior officials and bystanders, routines may not include explosions, smoke or flame, use of water, or any other hazardous substances.

為保障參加者安全、RoboCupJunior官方人員和旁觀者，慣例是禁止爆炸、煙霧、火焰、使用水、或任何其他有害物質。

1.8.2. Each team whose routine includes any situation that could be deemed hazardous, including the possibility of damaging the stage, must submit a report outlining the content of their dance routine to the chief judge BEFORE the competition. The chief judge may also request a demonstration of the activity before the stage performance. Teams not conforming to this rule may not be allowed to present their routine.

程序中若包含任何可視為危險的情況，包括可能損壞舞台，隊伍在賽前就必須向首席裁判提交報告，簡述其舞蹈程序。首席裁判可能要求該隊伍在舞台表演前先作示範。不遵守本規則的隊伍，可能不獲准表演。

1.8.3. In no circumstance is mains electricity allowed to be used on stage. This includes the use of mains electricity for robots, scenery and props.

在任何情況下，不允許使用舞台上的電源。這包括供電給機械人、佈景和道具。

### 1.9. Content 內容

Any presentation that includes violent, military, threatening or criminal elements will be excluded. Any team using an inappropriate name or logo will also be excluded. Participants are asked to carefully consider the wording and messages communicated in their presentations. What seems acceptable to one group may be offensive to friends from a different country or culture.

任何演示不容許有任何暴力、軍事、威嚇或犯罪元素存在。亦不容許隊伍使用不當字眼或標籤。參加者請小心地考慮他們在介紹中所傳達的字詞：比如字詞會否冒犯不同國家或文化的朋友。

### 1.10. Stage setup time 舞台準備時間

Teams are **strongly** encouraged to use the time whilst they are setting up the stage for their performance to introduce to the audience the features of their robots, technology used and highlights of the robotic performance and to introduce their team.

**強烈**建議隊伍設置舞台以作表演的同時，期間可向觀眾介紹他們的機械人功能，採用的技術，突出的機械性能，介紹自己的隊伍。

## 2. STAGE 舞台

### 2.1. Size 尺寸

2.1.1. The size of the performance stage area will be marked in a rectangular area of 6 x 4 meters (m) for robots with the 6m side facing the judges. If the whole body of a robot (main body itself, not including any huge extension from the body) moves outside the marked boundary of the performance area, the team will receive a penalty score. If in doubt please consult with the Chief Judge for clarification of "robot body" in relation to your robot design.

機械人的表演區域尺寸將被劃分為6 x 4 米的長方形區域且邊長6m一面面向裁判團。如機械人整個身體(主體本身不包括任何大型擴充部分)走出了表演區域標明的邊界是不會被取消資格的，但將被扣分。如有疑問請諮詢首席裁判澄清有關你所設計的機械人之“機械人身軀”。

2.1.2 Human performers may be inside and outside the marked area.

操縱者在機械人表演時，應在此標明的表演區域以外。



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2.1.3. The boundary of the performance stage area will be marked with a 50 millimeter (mm) black tape line, surrounded by a 20mm red tape line. This can allow teams to use the black and red line tape boundary to program a robot to identify the performance stage area.

表演區域的邊界將由50毫米(mm)粗的黑色膠帶標示，再以20mm粗的紅色膠帶圍繞。這讓隊伍能夠使用黑色及紅色線膠帶邊界對機械人編程，使其辨認表演舞台區域。

### 2.2. Surface 舞台表面

2.2.1. The floor provided shall be made of flat (non-glossy) white painted MDF (compressed wood fiber).  
舞台的地面是(無光澤)白色漆面的MDF(壓縮木纖維地板)

2.2.2. While floor joints will be taped to make them as smooth as possible, robots must be prepared for irregularities of up to 3 mm in the floor surface.

地面材料的接合處進行包裹以使其盡量平坦，但機械人需準備應對地面至多3mm的不規則。

2.2.3. Teams are encouraged to practice on the same flooring type to have a better simulation for robot conditions and reduce the set-up time at the RoboCupJunior International competition.

鼓勵隊伍於同一類型的地板練習，以更好地模擬機械人的條件及於RoboCupJunior國際比賽中減少設置所花時間。

2.2.4. Whilst every effort will be made to make the stage flat this may not be possible in all venues. Teams should be prepared for some irregularity in the surface of the stage.

大會將盡一切努力使舞台平坦，但無法確保所有會場如是。隊伍需要有遇上一些不規則的舞台表面情況之準備。

### 2.3. Stage environment 舞台環境

2.3.1. The RoboCupJunior organizers will endeavor to make variable lighting including spotlights available. Teams should not expect the performance stage area to necessarily be able to be darkened. We cannot guarantee direct or intense spotlights to be available. It is recommended that teams design their robots to cope with variations in lighting conditions, as lighting naturally varies from venue to venue. Teams should come prepared to calibrate their robots based on the lighting conditions at the venue.

RoboCupJunior主辦者將嘗試提供可變照明包括射燈。隊伍不可期望表演舞台域一定能夠變黑。我們無法保證直接或強烈射燈可用。源於不同賽場的自然照明會產生變化，建議各隊伍在設計機械人時要能適應燈光的各種變化。如需要，各隊伍在到場後，應調試好機械人，作出適應比賽場地照明條件的準備。

2.3.2. Teams using compass sensors should be aware that metal components of the stage may affect the compass sensor readings. Teams should come prepared to calibrate such sensors based on the conditions at the venue.

隊伍使用指南針傳感器，應知道舞台的金屬部件可能會影響指南針傳感器的讀數。隊伍應按場地的情況對傳感器進行校準。

### 2.4. Performance Stage Utilization 表演舞台的利用

2.4.1. The main performance dance stage will be made available for teams to practice on. In fairness to all teams who may wish to practice, a booking sheet will be used to reserve the stage for a short practice time.

參賽隊伍可於表演舞台上練習。有意練習的各參賽隊伍在公平情況下，採用預訂表預約舞台作短暫的練習。

2.4.2. The last team to practice on this stage before the official dance performance period starts must fully clean up the stage and clear the stage area at least 3 minutes before the performance start time.

在表演開始前，最後於舞台上練習的隊伍必須將舞台完全清理好，並最少要在表演開始前3分鐘內完成。

## 3. ROBOTS 機械人

### 3.1. Size 尺寸

Robots may be of any size. Any robot(s) or prop(s) taller than 4 meters from the stage floor must be discussed with the judges and permission sought.

機械人不限尺寸。任何機械人或支架距離舞台地板高度超出4m就必須向裁判團商議及獲批准。



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*Note: Changes from 2012 rules are highlighted in red.*

*Translated by RoboCupJunior Hong Kong*

### 3.2. Number of robots 機器人數目

There may be any number of robots on a team. However, using multiple robots does not necessarily result in obtaining higher points.

各隊機械人數量不限。然而，不會因派出多個機械人而取得較高分數。

### 3.3. Control 控制

3.3.1. Robots must be controlled autonomously. No member of the team may make physical contact with the robot during its performance UNLESS it has been discussed and approved by the judges PRIOR to the performance.

機械人必須是自主控制的。表演期間，沒有隊員可以身體接觸機械人，除非表演前已知會裁判並獲批准。

3.3.2. Robots may be started manually by human contact or with a remote control at the beginning of the performance. See also 1.6.3.

機械人可由人手啟動，啟動方式可為手動或是遙控。見1.6.3.

### 3.5. Costumes 服飾

Costumes for robots and human performers are encourage, points will be awarded

鼓勵機械人和表演者使用服裝，將可獲加分。

### 3.5. Communication 通訊

3.6.1. During the performance, any robot on stage may communicate with another robot from the same team. **The source of communication must be infrared (IR), Ultrasonic, Bluetooth and ZigBee.** It is the teams' responsibility to be aware that their robot communication does not interfere with other teams' robots when practicing or performing. Teams with robot communication MUST explain the device as well as the program to the judges at the interview.

表演期間，舞台上任何機械人可與舞台上相同隊伍另一機械人有通訊，但是**溝通方式僅限於紅外線、超聲波、藍芽和 ZigBee**。練習及表演時，各隊伍有責任確保他們的通訊不會干擾其他隊伍的機械人。隊伍使用機械人通訊必須於面試時向裁判解釋所使用的設備及程式。

3.6.2. **No team is permitted to use radio frequency (RF) signals (like WiFi or "radio control") as this may interfere with robots in other leagues. The only exception is the use ZigBee. Take care to make sure you are not using any radio frequency signals as part of remote control of the robots; Teams have in advertently used radio frequencies in the past. If you are unsure please check with the Chief Judge before your performance.**

隊伍是嚴禁使用無線電頻率信號(如WiFi或無線電操縱)，因可能對其他賽事的機械人構成干擾，僅使用ZigBee例外。請小心以確保你沒有使用任何無線電頻率信號作為機械人的控制器;以往使用無線電頻率的隊伍需留意。如果您不確定，請您在表演前交給首席裁判檢查。

## 4. JUDGING 裁決

### 4.1. Scoring 得分

4.1.1. The performance and technical score sheets can be downloaded from the official RoboCupJunior website (<http://robocupjunior.org>). **Teams are encouraged to study the score sheets in details in order to understand how they will be judged. The marks are allocated as follows:**

舞蹈和戲劇類別將採用不同的評分紙，舞蹈和戲劇評分紙可於RoboCupJunior官方網頁(<http://robocupjunior.org>)下載。

- 50% of the marks – technical scoring which is undertaken by an interview.

分數的50% – 進行面試時獲得的技術得分

- 50% of the marks – performance scoring

分數的50% – 表演得分

4.1.2. **There will be different performance scoring sheets for the Dance and Theatre categories.**

舞蹈和戲劇類別將採用不同的評分紙。



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4.1.3. In the first round all teams will be given 2 opportunities to perform their performances before the judges. The highest performance score will be added to technical interview score to calculate an overall score.

於首輪(初賽)，所有隊伍將有兩次機會於裁判前進行表演。最高的表演得分將與技術得分相加計算出總分。

4.1.4. The top scoring teams from the first round will then be announced and asked to perform again in the final round. The performance scores for the teams in the final are “zeroed” at this point. The performance scores from the final round and the interview scores will be used to calculate the overall score for the teams in the final.

於首輪(初賽)後，高得分的隊伍將被宣佈並要求在決賽再次表演。隊伍的表演得分會到決賽“歸零”，於決賽的表演得分和初賽的訪問得分將會用作計算總分作為隊伍的決賽分數。

### 4.2. Authenticity and Originality 真實性及原創性

The performance is to be unique and have never been used in a RoboCupJunior dance competition in any previous years' rounds of regional, national or international competitions.

表演是唯一的和未曾於以前的RoboCupJunior舞蹈賽項目的地域、國家或國際賽使用過。

Teams who, in the opinion of the judges, have knowingly produced duplicate robots, costume or performance movement (duplicate music is allowed) of another team or reused previous year's robots, costumes, props or performance of the same team will be subject to penalties. Penalties range from score reduction to a maximum penalty of exclusion from the competition. Teams are encouraged to carefully check that all robots, props and costumes conform to these rules.

如裁判認為隊伍的機械人、服裝或表演動作（相同音樂是允許的）明顯是抄襲另一隊伍或再次使用往年同一隊伍的機械人將遭受處罰。處罰範圍由隊伍會被扣分至重則喪失比賽資格。鼓勵隊伍小心檢查所有機械人、小道具及服裝均符合賽規。

### 4.3. Technical Creativity 技術創意

The Dance challenge is intended to be very open-ended! Teams are encouraged to be as **technically** creative and entertaining as they can. Teams who show creativity and innovation might be rewarded high point scores in the relevant sections.

舞蹈挑戰賽是非常開放的！鼓勵隊伍在技術上盡量創新及副娛樂性。副創造力及革新的隊伍在相關的部分會獲得高分。

### 4.4. Judging Categories 評分類別

Stage performances and technical interview will be judged using the published score sheets. Teams are encouraged to study the score sheets during the preparation for their performance to maximize their scores.

舞台表演和技術面試將使用已公佈的評分表來判斷。鼓勵隊伍在準備他們的表演時研究評分表，使他們的成績最大地。

### 4.5. Technical Interviews 技術面試

4.5.1. All teams will have a 15 minutes technical interview during the competition. It is strongly suggested for teams to read the interview score sheets before the interview to make sure good use of the interview.

比賽期間所有隊伍均有15分鐘的技術面試。強烈建議隊伍在面試前已閱讀過評分表，以確保面試回答是有用的。

4.5.2 Teams should ensure that they bring all their robots, props, posters, copies of the programs a completed Technical sheet and their poster. They should be prepared to demonstrate and discuss the use of all the sensors, electronics and technology that they have used. They should be prepared to demonstrate their robots and other technologies used.

隊伍應確保他們帶齊所有機械人、道具、海報、程序的拷貝、已完成的技術表格和他們的海報。他們應該準備示範及論述他們所運用的傳感器、電子學和技術。他們應該準備示範他們使用的機械人和其他技術。





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*Translated by RoboCup Junior Hong Kong*

4.5.3 A Robotics Dance Technical Sheet should be carefully completed by teams before they attend the competition and handed into to the dance organizing committee as soon as possible during the competition. The Robotic Dance Technical Sheet (as a document) will be posted online with the score sheets. The technical sheet is used to give teams the opportunity to explain the technical aspects of their robot to the judges. Teams are advised to study the Dance Interview Score sheet before they complete the technical sheets.

隊伍於出席比賽前，應小心完成機械人舞蹈技術表格，並於比賽期間盡早交到舞蹈組委員會。機械人舞蹈技術表格(為文件)將與評分表一同發佈在網上。技術表格為隊伍提供機會向裁判們解釋機械人技術方面事宜。建議隊伍在完成技術表格前先了解舞蹈面試評分表。

4.5.4. Interviews will take place in English, if teams require a translator they should inform the local organizing committee by e-mail prior to the event to allow translators to be organized.

面試將使用英語。如隊伍需要翻譯員，他們應事前透過電郵通知本地的舉辦委員會，以安排翻譯員。

4.5.5. If the judges consider it necessary teams that make it through to the finals may be asked to complete a second technical interview. If this occurs the score from the second technical interviews will be used to calculate the final score.

如裁判認為有必要，進入決賽的隊伍可能會被要求完成第二次的技術面試。如果發生這種情況，第二次的技術面試得分將用以計算決賽分數。

### 4.6. Prizes and Awards (Note: Rules 4.6.1 and 4.6.2 are not obligatory for national events)

獎項 (注意：於全國家賽中，規則4.6.1及4.6.2是不必要的)

4.6.1. Three prizes will be awarded in each age category (primary and secondary):

三個獎項將會頒發給每個年齡組別(初級組和高級組)：

**RoboCupJunior Dance Overall Prize** is awarded to the team with the highest combined technical and performance scores in the final

RoboCupJunior舞蹈綜合獎會頒發給決賽中技術得分和表演得分最高的隊伍。

**RoboCupJunior Dance Technical Prize** is awarded to the team with the highest technical score in the final round (excluding other winning teams)

RoboCupJunior舞蹈技術獎會頒發給決賽中技術得分最高的隊伍(不包括其他獲獎隊伍)。

**RoboCupJunior Dance Performance Prize** is awarded to the team with the highest performance (either theatre or dance) score in the final round (excluding other winning teams)

RoboCupJunior舞蹈表演獎會頒發給決賽中表演得分(劇場或舞蹈)最高的隊伍(不包括其他獲獎隊伍)。

In the event of a draw in the marks the judge's discretion will be used to determine the winners.

在相同分數的情況下，裁判將行使裁量權來確定獲獎者。

4.6.2. Awards will be given to individual teams in the following categories:

獎項將按下標準授予個別隊伍：

*Robot Programming*; 機械人編程；

*Robot Construction*; 機械人結構；

*Using Sensors*; 傳感器使用；

*Choreography*; 舞蹈編排；

*Costume*; 服飾；

*Entertainment Value*; 娛樂價值；

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These awards will be awarded based on both the team performance and technical interview upon the discretion of the judges. Individual teams can receive only one award.

這些獎項將根據隊伍的表演和技術面試，由裁判決定頒發。個別隊伍可獲頒一個獎項。



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4.6.3. There will also be certificates awarded for the following categories: 另外按以下評分標準也將獲頒證書：

**Best Team Collegiality:** This award goes to the team who, by popular vote, has given the greatest support to other teams – this support can be demonstrated in a number of ways, such as providing assistance with components, developing friendships and/or giving encouragement to other teams. The vote described in section 6.4.2 will be used for selecting the best Collegiality Award.

**最佳隊伍合議：**獲該獎隊伍是由民眾投票產生，為其他隊伍給予最大的支持。這支持方式可以有很多種，例如組件的協助、或友誼和鼓勵。於6.4.2節的投票描述將用於選擇最佳聯合領導獎。得分標準見以下公式：

**Best Poster:** This award goes to the team who, at the discretion of the judges, has produced the best poster that describes the team and robot technology used. See also 5.2.

**最佳海報：**獲該獎隊伍是由裁判所裁定，所提供的最佳海報是描述隊伍和機械人所使用的技術。同見5.2。

**Best Creative Presentation:** This award goes to the team who, at the discretion of the judges, has produced the most creative and technically interesting digital display that supports and enhances the robot performance. This could be a video, slide-show, images or any other form of digital product that is displayed during the performance.

**最佳創意介紹：**獲該獎隊伍是由裁判所裁定，為支持和提高機械人的表演，上演最具創意和技術上有趣的數碼顯示。這可能是表演期間所顯示的視頻、幻燈片顯示、圖像或任何其他形式的數碼產物。

**Best Novice Team:** This award goes to the primary and the secondary team placed highest in the competition overall and have not received another award, and where ALL members of the team are competing at RCJ international for the first time (this does not include a team having a team member(s) who has (have) competed in other RCJI leagues/categories).

**最佳初次參賽隊伍：**獲該獎的小學及中學隊伍在比賽中取得最高成績，未曾取得另一獎項，隊中的所有隊員都必須是第一次參加 RCJ國際比賽(這不包括隊中有隊員參加過RCJ國際賽的其他項目)。

4.6.4. No one team shall receive more than 3 prizes, awards and/or certificates excluding the Super team awards.

無一隊伍可獲頒3個以上的獎項或證書，超級隊伍獎除外。

4.6.5. RoboCup Junior is an educational project. It is important that team members learn from their experiences with RCJI, and have the opportunity to improve in later years if they so choose. The organizers will provide feedback on each team's performance at the conclusion of competition. The sheet will indicate to the team their areas of strength and also areas needing improvement. It is important to note that these sheets are not to be used to debate positions, decisions or competition scores with the judges.

RoboCupJunior 是一項具有教育意義的項目。為保證這個目的，參賽隊員能夠從他們在RoboCup Junior的經歷中學習，非常重要。他們能夠在以後的日子有提升的機會。舉辦大會將於比賽完結時，向每隊給予表現的評價。在紙上指出隊伍在比賽中的強項和需要改進的地方。需要注意的是，這些紙不是用來辯駁裁判的判決和比賽成績。

## 5. DOCUMENTATION 文件

### 5.1. Authentication 證明

All teams are encouraged to bring a poster display describing their preparation efforts including photographs of the different stages of robot development. The poster display must be presented during the interview, and may be called upon to help establish the authenticity of a teams' performance. Team should also complete the Robotic Dance Technical Sheet before the interview.

鼓勵所有隊伍帶備海報以描述他們所準備的努力成果，包括在不同開發階段的機械人照片。海報必須於面試中展示，及有助建立隊伍所作表演的真確性。同時隊伍應於面試前完成機械人舞蹈技術表格。



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*Note: Changes from 2012 rules are highlighted in red.*

*Translated by RoboCupJunior Hong Kong*

### 5.2. Poster Displays 海報展示

5.2.1. Teams will be given some public space to display a poster board. The size of the poster should be no larger than A1 (60 X 84cm). The poster should be brought along to the technical interview. After the interview the poster should be displayed in the location indicated.

各隊伍將有指定的公共空間展示海報展板。海報的大小不應不大於A1(60 X 84厘米)。技術面試時帶同海報。面試後，海報應展示在指定的位置。

5.2.2. The aim of poster is to explain the technology used in the robots. Posters should be made in an interesting and entertaining format, as they will be viewed not only by the judges, but also by other teams and the visiting members of the public. The poster should provide information about the team and how you developed the robot(s).

Areas that need to be covered include: team name, division (primary or secondary), a picture of your team, your country and your location in your country, a little about area you live in, pictures of the robot(s) under development, and information about your robot technology. Include any interesting or unusual feature about the team, robot, your background or your entry.

海報是用以解釋機械人所使用的技術。海報應做到富趣味性和娛樂性，它們將不僅供裁判觀看，還供其他隊伍和公眾人士觀看。海報應提及有關隊伍和怎樣研製機械人。

需要覆蓋的部分包括：參賽隊名、組別(小學組或中學組)、隊伍照片、所屬國家、在國家中的位置、一些關於你居住地的特色，研製歷程中機械人的照片及機械人的技術資料。包括任何有隊伍、機械人、你們背景或入圍的有趣或特別的事宜。

5.2.3. A certificate will be awarded to the team with the most outstanding poster. Please refer to section 4.

最佳的海報隊伍將獲頒發證書。請參考章節4。

## 6. CODE OF CONDUCT 操行

### 6.1. Spirit 精神

6.1.1. It is expected that all participants, students and mentors, will respect the RoboCup Junior mission. In addition, participants should keep in mind the values and goals of RoboCupJunior.

期望所有的參與者、學生和教練能尊重RoboCupJunior的宗旨。再者，參加者應該銘記RoboCupJunior的價值和目標。

6.1.2. It is not whether you win or lose, but how much you learn that counts. You will really miss out on a lifelong learning experience if you don't take this opportunity to collaborate with students and mentors from all over the world. Remember this is a unique moment!

無論輸贏，重在學習。如果不能抓緊時機與來自全球各地的師生友善交往相互切磋，那你將會是不折不扣的大輸家。謹記千載難逢！

### 6.2. Fair Play 公平比賽

6.2.1. It is expected that the aim of all teams is to participate in a fair and clean manner.

期望所有參賽隊伍的目標皆為公平及環保的比賽。

6.2.2. Humans who may cause deliberate interference with robots or damage to the stage will be disqualified, if part of a team. If not part of a team they will be ask to leave the venue.

任何人為故意干擾其他機械人或是故意損壞比賽場地的情況，該肇事者若為參賽隊伍成員，將失去其比賽資格；若為其他人員，則驅逐出場。

6.2.3. The team is responsible for removing all debris left from their routine that may interfere with the performance of subsequent activities.

各隊伍均有責任清理場地以免影響隨後的表演活動。

6.2.4. Remember: Helping those in need and demonstrating friendship and cooperation are the spirit of RoboCup Junior as well as for making a better world.

銘記：「助人者，人將助他(勿吝惜援助之手)。RoboCupJunior精神也。」



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*Note: Changes from 2012 rules are highlighted in red.  
Translated by RoboCupJunior Hong Kong*

### 6.3. Sharing 分享

6.3.1. It is understood that RCJI event with any rich technological and curricular developments should be shared with other participants after the competition.

RoboCupJunior國際賽過後，任何富強技術及課程發展都應與其他參加者分享。

6.3.2. Any developments may be published on the RoboCupJunior Web site following the event.

RCJI賽後，所有的進展情況於可能公佈於RoboCupJunior的網站上。

6.3.3. Sharing information furthers the mission of RoboCupJunior as an educational initiative.

分享資訊進一步加強了RoboCupJunior作為一項具有教育意義的公開化活動。

### 6.4. Collegiality 聯合領導

6.4.1. In keeping with the spirit and collegiality aspects of RoboCup Junior International., a party will be provided by the organizers for all team members, mentors and supporters. It is strongly requested that all such individuals delay their departure sufficiently to attend, even if the party is held after the finals and presentations. The organizers request all team members bring business-sized cards to share with other teams at the party. These cards could include the team name, its members' name(s) and contact details, so students can remain in contact with each other after the event. This is optional, but encouraged. It is also requested, but not compulsory, for team members to wear either national dress, or some icon that identifies them with their country. This can be done in a humorous manner, such as an animal mascot from their country or another creative idea.

為保持國際RCJ的精神和協作，主辦單位將會為參賽隊員、教練和他們的支持者舉辦一個聚會。即使聚會是在決賽和展示之後舉辦，也強烈要求各隊隊員能夠有足夠的時間參加。大會要求各隊隊員帶名片在聚會上分享，這些名片應包括隊名，參賽隊員名和具體的聯系方式，以便在大會結束之後能夠繼續保持聯系，這是自發性的，但值得鼓勵的。要求但不強制隊員穿著民族服飾，或者能夠代表自己國家的一些圖案，可以盡量做得幽默一些，如配戴代表本國動物的圖案或其它創意。

6.4.2. Each participating team will have one vote to nominate the team that displayed the greatest cooperative interactions and shared support with other teams. Please refer to section 4 for Collegiality Award.

每支參賽的隊伍將各有一票的權利投票推薦一支與其他隊伍合作交流表現最好的隊伍。請參考章節4提及的聯合領導獎。

### 6.5. Behavior 行爲

6.5.1. All movement and behavior is to be of a subdued nature within the event venue.

賽場內的所有活動和行爲都應有所克制。

6.5.2. Competitors are not to enter set-up areas of other leagues or other teams, unless expressly invited to do so by other team members.

參賽者不可進入其他同盟或其他隊伍的設置區域，除非明確地得到其他隊伍成員的邀請。

6.5.3. Participants who misbehave may be asked to leave the building and risk being disqualified from the event.

行爲不端的參賽隊員將被驅逐出場甚至取消比賽資格。

### 6.6. Mentors 教練

6.6.1. Mentors (teachers, parents, chaperones and other adult team-member) are not allowed in the student work area except to assist carrying equipment in or out of the area as teams on the arrival or departure days.

教練(老師、父母、監護人和其他成人成員)不允許駐足於學生工作區域。除了在進館或撤館日，協助隊伍將設備搬進或搬出學生工作區域。

6.6.2. If a problem is encountered with a computer or other device that is clearly beyond the reasonable ability level of a student to repair, a mentor may request permission from the organizers to enter the work area for the sole purpose of advising on that repair. They must leave the work area immediately after this is completed. Rule 6.6.2 still applies at these times.

如果計算機或其他設備出現學生不能解決的問題時，大會允許一名教練進入工作區域，其唯一目的是提出維修的建議。完成後教練必須立即離開工作區域。規則6.6.2，這時仍有效。



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*Note: Changes from 2012 rules are highlighted in red.*

*Translated by RoboCupJunior Hong Kong*

6.6.3. Mentors are not allowed to set up such equipment on stage, as this should be the responsibility of team members. Organizers will assign volunteers to teams that need an assistant for stage set-up. Teams should request this assistance to the officials.

教練不允許在舞台上裝配設備，而這應該是隊員的職責。大會將會指派義工給有需要協助設置舞台的隊伍。需要協助的隊伍應先向工作人員提請。

6.6.4. A mentor found in the student work area without an acceptable reason may lose his/her access to the venue and the team marks will be penalized.

一旦發現教練在沒有合理原因下出現在學生工作區域，將會被逐出會場和有關隊伍將遭扣分。

6.6.5. **A mentor found to be involved with mending, building or programming the robot(s) and/or directing choreography may lose his/her access to the venue and the team marks will be penalized. This applies to both the "individual" and "super team" competitions.**

一旦發現教練為機械人進行縫補衣服、組裝、程式編寫和/或指導舞蹈編排，將會被逐出會場和有關隊伍將遭扣分。這適用於“個別”和“超級團隊”的比賽。

### 6.7. RoboCupJunior Officials RoboCupJunior工作人員

6.7.1. The referees and officials will act within the spirit of the event.

裁判和工作人員的行為應遵守RoboCupJunior的活動精神。

6.7.2. Interviews will be judged by at least two RoboCupJunior officials. Stage performances will be judged by a panel of at least three officials. One of the performance judges is a RoboCupJunior official who judges the interview as well.

面試將最少由兩名 RoboCupJunior 工作人員評審。舞台表演將最少由三名 RoboCupJunior 工作人員評審。其中一名舞台表演的裁判同時擔任面試裁判。

6.7.3. The RoboCupJunior officials shall not have close relationship with any of the teams in the age-group they judge.

RoboCupJunior工作人員與其負責評審之年齡組別中的任何隊伍沒有親密關係。

### 6.8. Bulletin 公告板

6.8.1 Teams will be responsible for checking the updated information during the event. The updated information will be provided on notice boards in the venue and (if possible) on the RoboCupJunior website. The information will be announced at the beginning of the event and will be posted on the notice boards as well.

活動期間隊伍有責任檢查更新的信息，更新的信息將顯示於場地的告示板及(如可能)在RoboCupJunior網站上。信息將於活動開始前公佈，同時被張貼在告示板上。

6.8.2. Newsletters will be disseminated during the event to ensure teams and mentors have the latest information.

簡報將在活動期間發佈，以確保隊伍和教練獲得最新信息。

6.8.3 Queries regarding the rules or their interpretation may be sent to the Chairman of the Technical Committee for Dance, Nicky Hughes (UK) at [n.a.hughes@btinternet.com](mailto:n.a.hughes@btinternet.com)

如對有關規則或他們闡明有疑問可電郵致 [n.a.hughes@btinternet.com](mailto:n.a.hughes@btinternet.com) 與舞蹈技術委員會 Nicky Hughes (英國)。

**Note: The English version of these rules shall prevail wherever there is a discrepancy between the English and the Chinese versions.**

注意：本賽規的中英文本如有歧義，概以英文本為準。