

TYPT

(Taiwan Young-Student Physicists' Tournament)

甄選說明會

簡介

IYPT ----- 38th

TYPT -----17th

題目 12/17--- Aug

報名 5人/隊---Oct

競賽 26隊5場---Mar



辯論競賽(全英文)

Physics Fights (PF1~PF5)

流程

Opponent 選題挑戰

Reporter 報告

Opp、Rep 問答討論

Reviewer 提問

Reporter 總結

Jury 提問



組隊培訓

苦與甘

探究實作進階版
獨特的學習歷程

豐厚獎金

銅牌	30,000	5隊
銀牌	60,000	5隊
金牌	150,000	3隊



校內甄選

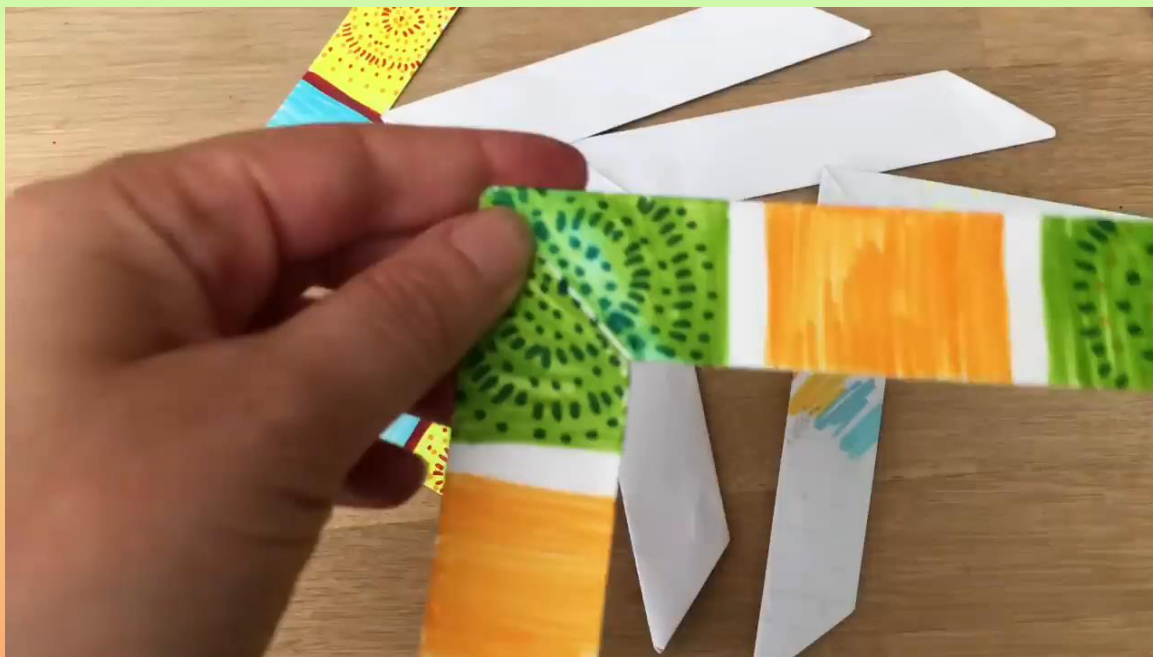
- 時間與地點：9/26(四)12:10，科教3樓303實驗室
- 題目：
 - NO.1 Invent Yourself: Paper Boomerang
 - NO.2 Air Muscle
 - NO.7 Ruler Cannon
- 方式：以上題目擇1報告3 min，Q&A 2min
- 報告內容：實驗規劃、數據處理、理論建模
- 正取10名、備取數名。



校內甄選題目

NO.1 Invent Yourself: Paper Boomerang

Make a returning boomerang from a sheet of paper by folding and/or cutting. Investigate how its motion depends on relevant parameters.



辯題	難度
No.1 Invent Yourself: Paper Boomerang	★
No.2 Air Muscle	★★
No.7 Ruler Cannon	★



https://www.youtube.com/watch?v=p0A_Lwr7a9s

校內甄選題目

NO.2 Air Muscle

Place a balloon inside a cylindrical net (as is sometimes used to wrap garlic) and inflate it. The net will expand and shorten. Investigate the properties of such a “muscle”.

GazeT
Science Lab

辯題	難度
No.1 Invent Yourself: Paper Boomerang	★
No.2 Air Muscle	★★
No.7 Ruler Cannon	★

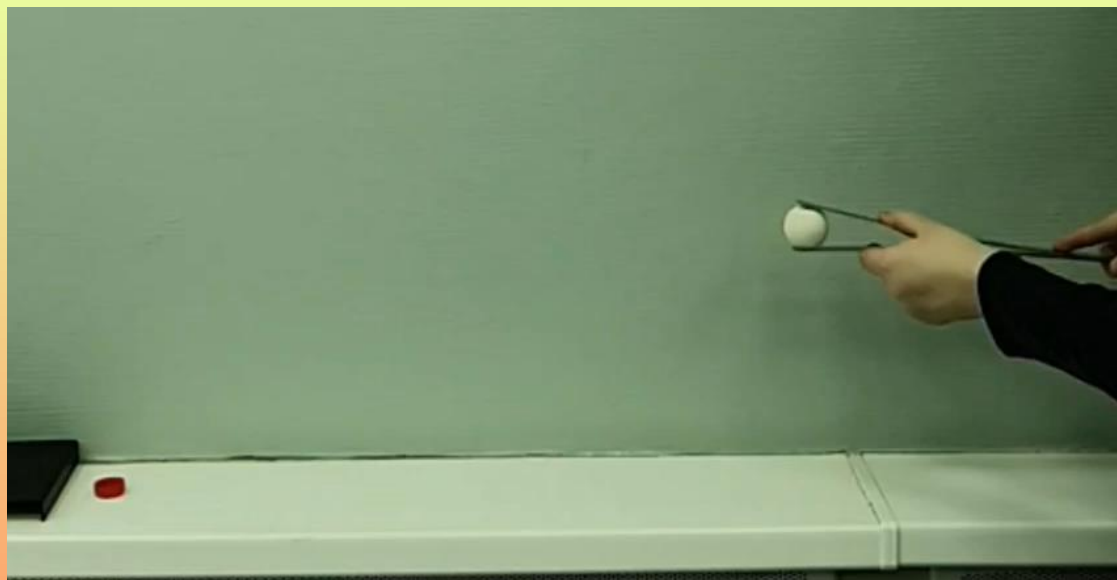


<https://www.youtube.com/watch?v=pBKBAaW3ydE>

校內甄選題目

NO.7 Ruler Cannon

Two rulers are tightly held against each other. A round projectile (e.g. a plastic bottle cap or a ball) is inserted between them close to one of their ends. When extra force is exerted on the surface of the rulers, the projectile is ejected at a high speed. Investigate this effect and the parameters that affect ejection speed.



<https://www.youtube.com/watch?v=GdM-nUX6QDQ>

辯題	難度
No.1 Invent Yourself: Paper Boomerang	★
No.2 Air Muscle	★★★
No.7 Ruler Cannon	★



甄選標準

- 實驗規劃

- (1) 資訊圖表整理(python, excel ,ggb, desmos...)
- (2) 裝置架設(樂高機器人、Arduino、樹梅派...)
- (3) 資訊建模(3d物理建置、數據影像使用等...)

- 英文能力、上台報告能力及流暢度

- 基礎數理能力：能及時進行英文討論，且具有科學合理性。

校內甄選報名資訊

- 報名截止日期：9/19(四)12:00前
- 報名方式：請以校內google帳號登入後填寫表單報名，表單連結如下，或掃描右方QRcode：
<https://forms.gle/vd2THeQVcMcRVCAp7>
- 其餘相關訊息請參考學校網站公告：
<https://www.tnfsn.tn.edu.tw/sub/latestevent/Details.aspx?Parser=22,22,73,,,14080>

