

EXPERIMENTACIÓN EN FÍSICA. USO DEL SMARTPHONE

Patricia Martínez Martínez



ESO

Star Walk 2



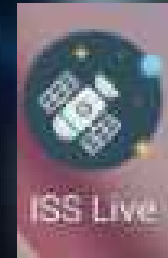
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Earth Now



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ISS Live



ISS Live
Camara 1 (HD)

⏸

Día, próxima puesta de sol en 0.18.25

latitud: 51.05
longitud: -112.45
Altitud: 411.15 km
velocidad: 27611.3 km/h

International Space Station

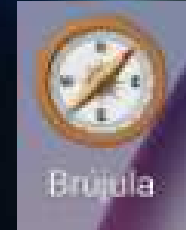
Estados Unidos

Google

The screenshot shows the ISS Live mobile application interface. At the top, it displays the title "ISS Live" and "Camara 1 (HD)". Below this is a video player showing a live feed of the Earth from space, with a pause button in the center. Under the video, there is a notification: "Día, próxima puesta de sol en 0.18.25". A data box provides the following information: "latitud: 51.05", "longitud: -112.45", "Altitud: 411.15 km", and "velocidad: 27611.3 km/h". Below the data is a map showing the location of the International Space Station over the United States. The map includes a label for "International Space Station" and "Estados Unidos". The Google logo is visible at the bottom left of the map area.

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Brújula



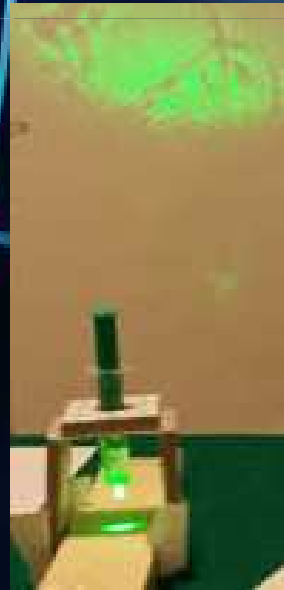
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Construcción de una brújula



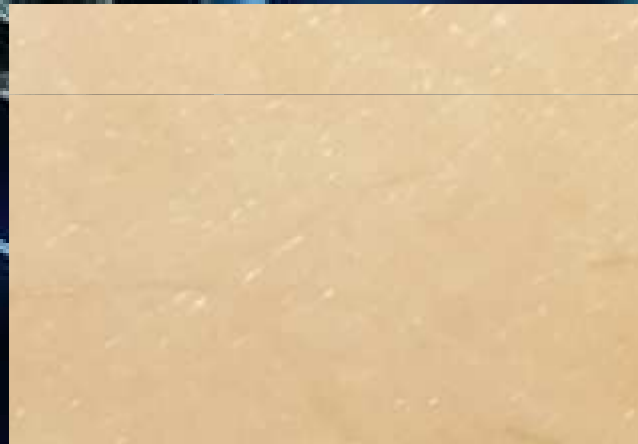
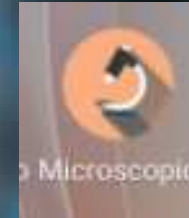
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Construcción de un microscopio



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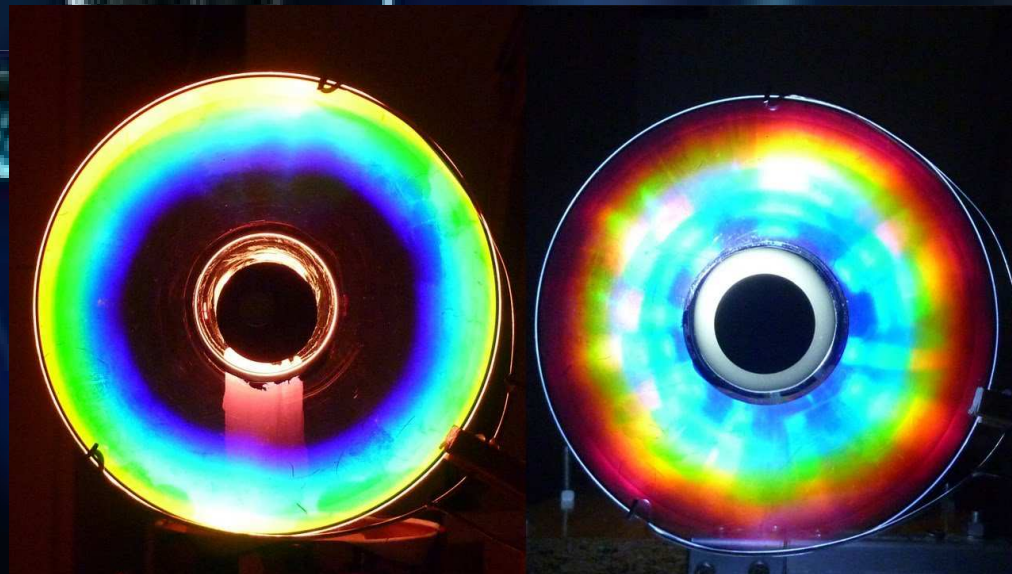
Microscopio



ESO

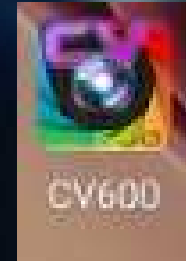
Espectrofotómetro

Visualizador del espectro de la luz con un CD



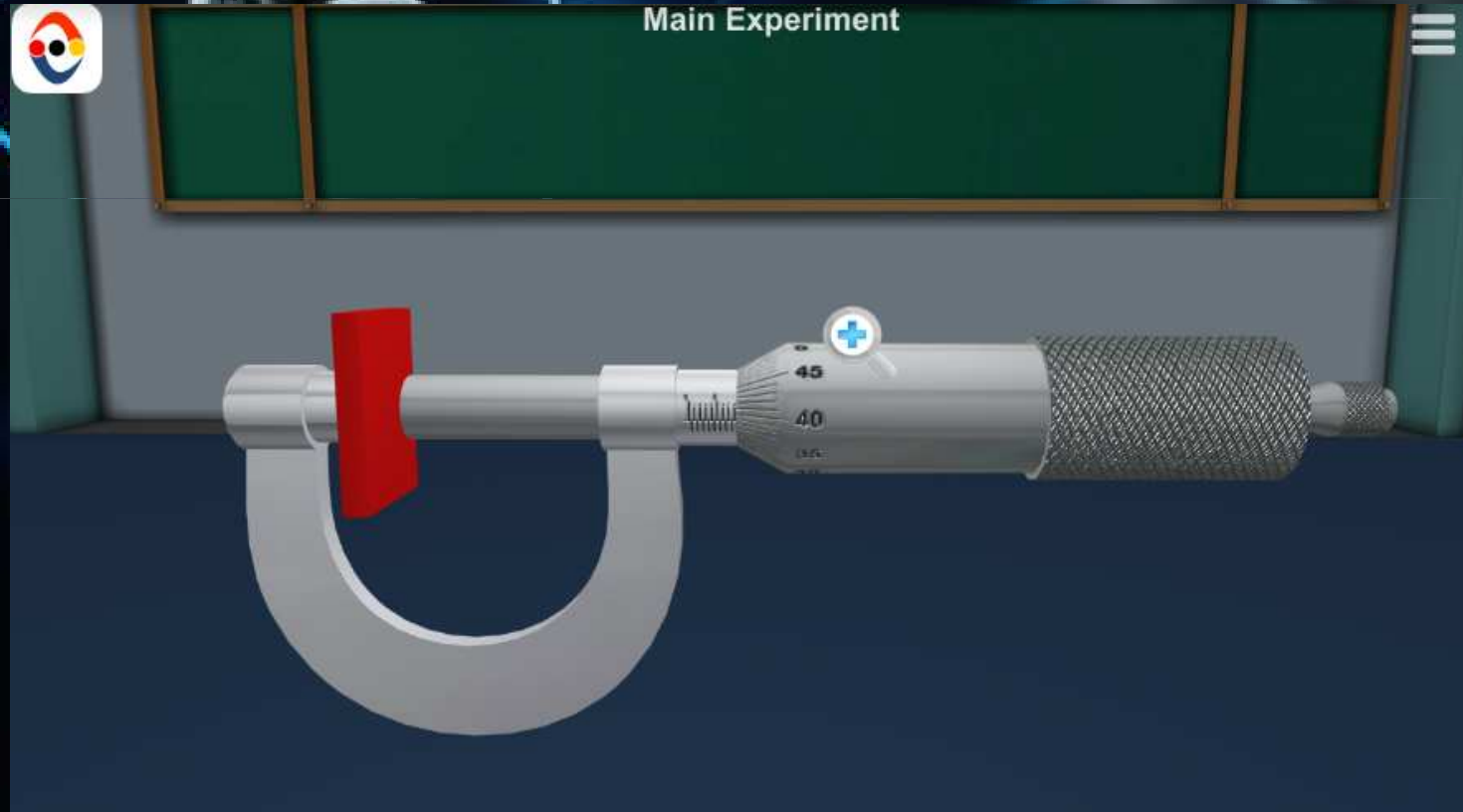
ESO

CV600



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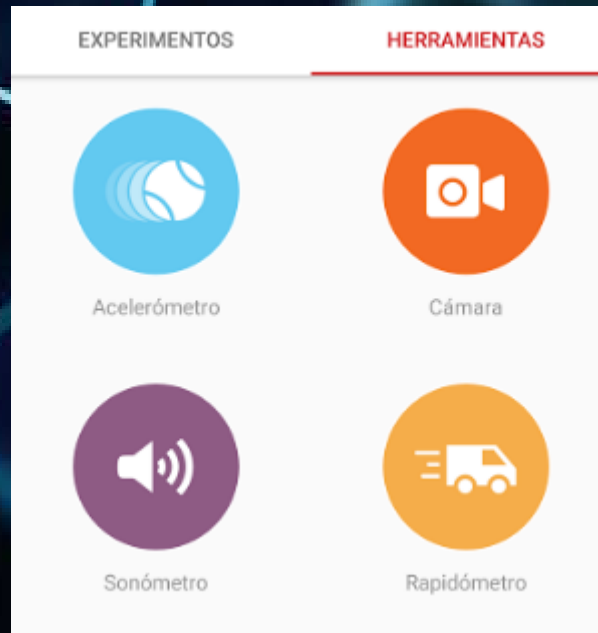
LabInApp



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Acelerómetro Rapidómetro Cámara



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Sonómetro



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Construcción de bombilla con mina de lapicero



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Vectores



← Vector

Ingres los valores y elige una operación

$\vec{v}_1 = (\underline{0.0} , \underline{0.0} , \underline{0.0})$

Agregar un nuevo vector

$\vec{v}_1 + \vec{v}_2$ SUMA	$\vec{v}_1 - \vec{v}_2$ RESTA	$\vec{v}_1 \cdot \vec{v}_2$ PRODUCTO PUNTO
$\vec{v}_1 \times \vec{v}_2$ PRODUCTO CRUZ	$K \vec{v}$ PONDERACIÓN	$ \vec{v}_1 $ MÓDULO

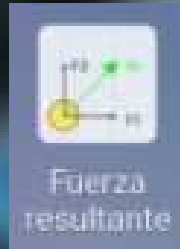
Resultado:

Selecione mínima 2 vectores para la lista de operación.

AGREGAR A LA LISTA

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Fuerza resultante



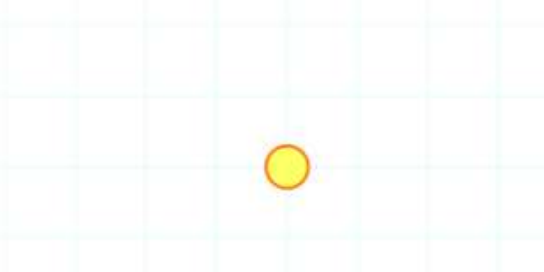
CALCULADORA DE FUERZAS RESULTANTES

Introduce valores para cada una de las fuerzas:

F1 Introducir

Módulo (N): Borrar

Ángulo (°): Calcular



50 N

Fuerza resultante:
Coord. cartesianas:
Coord. polares:

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Dinamómetro



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LabInApp



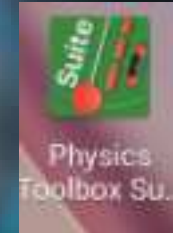
The screenshot shows the "Main Experiment" interface of the LabInApp. The central part of the screen displays a 3D simulation of a pendulum setup on a laboratory bench. The interface includes a top navigation bar with the app logo and a hamburger menu icon. On the right side, there is a control panel with the following elements:

- Maximum Swings:** 10
- Measurement Selection:** Two radio buttons are present. "Tangential Acceleration" is unselected, and "Tangential Velocity" is selected.
- Length of Thread:** 0.55 m, with a slider below it.
- Radius of Bob:** 0.05 m
- Buttons:** "Additional Activities", "Demo Video", "Experiment Details", and "Reset".

At the bottom left, a timer shows 3.41 s. At the bottom center, there are four playback control buttons: back, pause, play, and forward.

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Estroboscópio



Estrobo...

Frecuencia	1.00	Hz
	1000	ms

Si el flash de la cámara no está funcionando pulse el botón Strobe Beta.

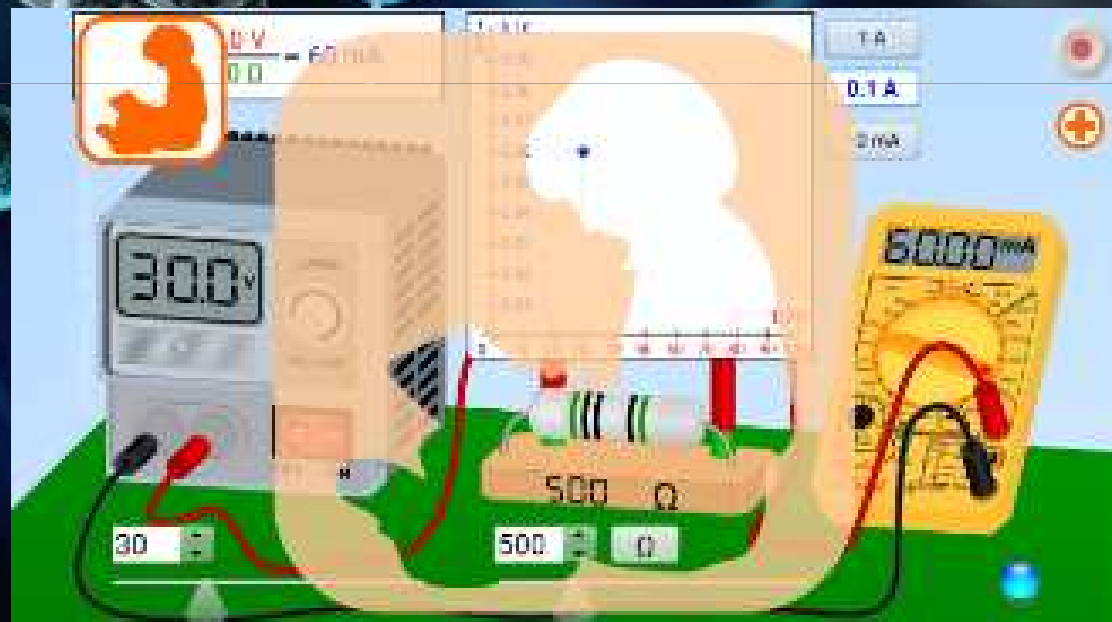
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Giroscopio



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Física en la escuela



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Construcción de un cohete



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Ray Optics



The screenshot displays the Ray Optics software interface. At the top, there is a toolbar with icons for a lens, a document, a question mark, and a menu. Below the toolbar are four buttons: "Lens", "Mirror", "Slab", and "Object". The main workspace shows a ray diagram on a dark background. A vertical cyan line represents the lens. A horizontal red line represents the optical axis. A yellow horizontal line represents the object, and a green horizontal line represents the image. A white ray is shown passing through the lens. A red cursor is positioned at the top right of the diagram.

Cursor (2509.0,-550.0)

Object (x = 1640.0 , height = 180.0)

Image (x = 677.59 , height = -9.32)

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Amperímetro



BASIC ADVANCED POWER PROFILE

Sufficient Electric Current

Discharging
-974 mA

HELP?

A screenshot of a mobile application interface for a battery tester. The interface is displayed over a background of a glowing atomic model. At the top, there are three tabs: "BASIC", "ADVANCED", and "POWER PROFILE". Below the tabs, the text "Sufficient Electric Current" is displayed. A progress bar is shown below the text. The word "Discharging" is written in red, followed by "-974 mA" in red. At the bottom, there is a "HELP?" button.

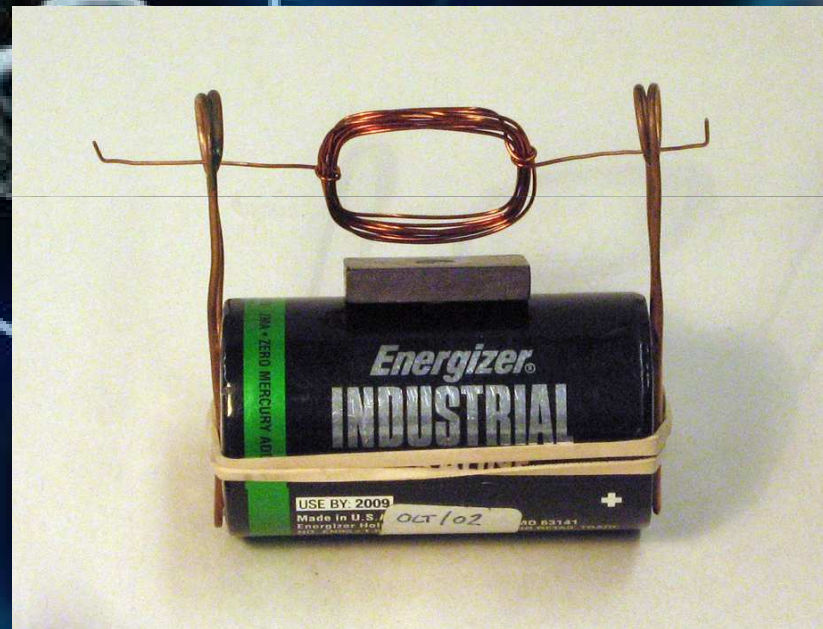
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Gausómetro



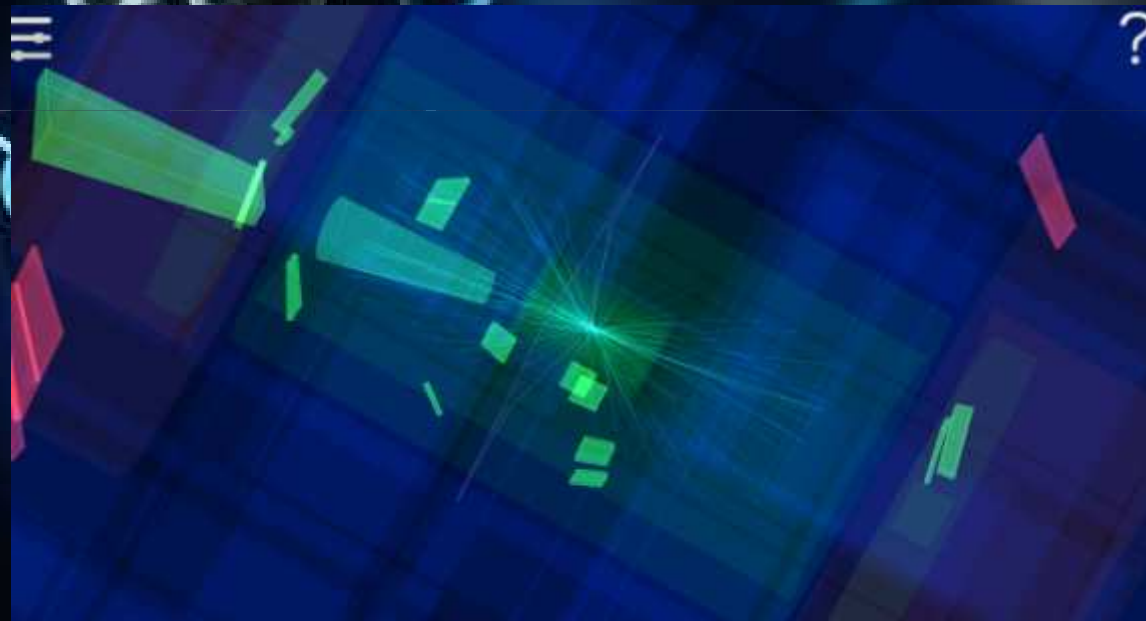
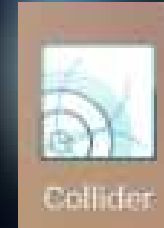
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Mostrar inducción electromagnética



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Collider



Gracias por su atención

