NATIONAL
Quantum & Dark Matter
ROAD TRIP

QUANTUM DIORAMA CHALLENGE

PRIZES TO BE WON!

1st $100

2nd $85

3rd $65

Best School $250

SUBMISSIONS WILL BE JUDGED WHEN THE NATIONAL QUANTUM & DARK MATTER ROAD TRIP VISITS YOUR SCHOOL
Visit https://www.qdmroadtrip.org/diorama/ for more info

- ✓ Is your school being visited during the National Quantum & Dark Matter Road Trip?
- ✓ Do you have a passion for science or are you curious about quantum physics?
- ✓ Have you got a crafty and creative mind?

It's time to get your craft on for the **QUANTUM DIORAMA CHALLENGE**! Get your pipe cleaners, toilet rolls, alfoil and glue guns out to create an exhibit showcasing your knowledge of a fundamental concept or pivotal experiment in the history of **QUANTUM PHYSICS**! Your exhibit may be no bigger than a shoebox, but can have as many bells and whistles as you can imagine.

national science week

Inspiring AUSTRALIA

ARC CENTRE OF EXCELLENCE FOR DARK MATTER PARTICLE PHYSICS

An Australian Government Initiative

EQUS
Australian Research Council Centre of Excellence for Engineered Quantum Systems

QUANTUM DIORAMA CHALLENGE

NATIONAL Quantum & Dark Matter ROAD TRIP

WHAT IS A DIORAMA?

A diorama is a 3D model depicting a scene or a theme that is made Inside of a shoebox or another small container. A diorama may have little painted human figurines living inside of it, it could depict an important historical event or represent an interesting location or landscape. Your diorama will represent a scene or an idea from quantum physics! It could have moving parts, models of famous physicists, electronic components or informative text panels to explain your creation.

HOW CAN I MAKE ONE?

To make a diorama the most basic ingredient needed is a shoebox or another similarly sized box. You may also find the following items useful:

- Craft paper
- Popsicle sticks
- Sticky notes to explain your idea
- Modelling clay to make figurines
- Dental floss to suspend objects in mid-air
- Matchboxes to make furniture or experimental lab equipment
- Ping pong balls to represent atoms
- The possibilities are endless...

WHAT THEME SHOULD I CHOOSE?

Quantum physics can be challenging to visualise - so get creative to explain your idea! Have you heard of Schrödinger's cat? How about the wave-particle duality? What about the photoelectric effect? Could you represent these ideas creatively in a diorama? Over the years many experiments have been made and ideas discovered about quantum physics. Take a look at these amazing resources to gain some inspiration!

Our website: https://www.qdmroadtrip.org/resources/
Youtube: Eugene Khutoryansky's Quantum Physics Videos
Animated Website: Quantum Made Simple
Youtube: MinutePhysics (Quantum Mechanics Playlist)