



# PHYSICS SUSTAINABILITY THROUGH A SCIENCE LENS

**STAV VCE  
CONFERENCE  
SERIES** Biology, Chemistry,  
Environmental Science,  
Psychology, Physics

FRIDAY 17 FEBRUARY 2023

|                   |   |
|-------------------|---|
| 8:00am - 8:30am   | Atrium (foyer) Arts West Building, University of Melbourne<br>Registrations   Community Expo Open   University of Melbourne, Parkville<br>Light breakfast provided upon arrival   |
|                   | <b>PLENARY:</b> <b>LIVE STREAM</b> Kathleen Fitzpatrick Theatre, Arts West Building   |
| 8:45am - 8:55am   | <b>PRESIDENT'S WELCOME:</b> Alexandra Abela, STAV President   |
| 8:55am - 9:10am   | <b>ACKNOWLEDGEMENT OF COUNTRY:</b> Stacie Piper   |
| 9:10am - 9:15am   | <b>INTRODUCTION OF KEYNOTE SPEAKER 1: MICHAEL ROSENBROCK, STAV COUNCILLOR</b>   |
| 9:15am - 10:00am  | <b>KEYNOTE SPEAKER 1:</b> Dr Rebecca Allen, PhD in astrophysics at Swinburne University of Technology<br><b>KEYNOTE ADDRESS:</b> Student Powered Research   |
| 10:00am - 10:05am | <b>INTRODUCTION VCAA:</b> Chris Wines, STAV Councillor  |
| 10:05am - 10:25am | <b>VCAA UPDATE:</b> Maria-James Curriculum Manager, Science Victorian Curriculum and Assessment Authority (VCAA)  |
| 10:25am - 11:10am | <b>CHIEF ASSESSOR UPDATE:</b> Andrew Hansen, Chief Assessor, Victorian Curriculum and Assessment Authority (VCAA)   |
| 11:10am - 11:15am | Short Break   |
| 11:15am - 12:00pm | <b>SESSION BLOCK A</b>  |
| 12:00pm - 12:10pm | SHORT BREAK   |
| 12:10pm - 12:55pm | <b>SESSION BLOCK B</b>  |
| 12:55pm - 2:00pm  | LUNCH BREAK AND COMMUNITY EXPO  |
| 2:00pm - 2:45pm   | <b>SESSION BLOCK C</b>  |
| 2:45pm - 2:50pm   | SHORT BREAK   |
|                   | <b>LIVE STREAM</b> Kathleen Fitzpatrick Theatre, Arts West Building   |
| 2:50pm - 2:55pm   | <b>INTRODUCTION OF KEYNOTE SPEAKER 2:</b> Michael Rosenbrock, STAV Councillor   |
| 2:55pm - 3:25pm   | <b>KEYNOTE SPEAKER 2:</b> Prof Lisa Harvey Smith<br><b>KEYNOTE ADDRESS:</b> What does the future of STEM education look like?   |
| 3:25pm - 3:55pm   | <b>KEYNOTE:</b> STEM Discussion Panel: Sustainability Through a Science Lens<br><b>PANELISTS:</b> Prof Lisa Harvey Smith, Prof Asha Rao, Dr Yvonne Mah, Bronwen Baume-Tarrant, Alexandra Abela, Michael Rosenbrock, Moderator: Emily Rochette |
| 3:55pm - 4:00pm   | <b>LIVE STREAM</b> <b>PRESIDENT'S CLOSING REMARKS:</b> Alexandra Abela, STAV President<br>Passport game prize draw: Edrolo  |
| 4:05pm - 5:00pm   | Post-Conference Celebration and Networking<br>Atrium (foyer) Arts West Building, University of Melbourne  |

# FRIDAY 17 FEBRUARY 2023

## SESSION 1 **LIVESTREAM**

**Introducing VCE Physics with a First Nations lens**

LOCATION:  
Kathleen Fitzpatrick Theatre, Arts West Building

PRESENTED BY:  
Lisa Moloney,  
Connecting with Country

## SESSION 2

**IDEA - A structured approach to scientific explanations**

LOCATION:  
Kathleen Fitzpatrick Theatre, Arts West Building

PRESENTED BY:  
Catherine Bellair,  
Thomas Carr College

**Engaging Students Through Real Astronomical Data**

LOCATION:  
Cecil Scutt Room, Room 227, L2, Old Arts Building

PRESENTED BY:  
Robert Hollow, CSIRO,  
Space and Astronomy

## SESSION 3

## SESSION 4

**Modelling Motion: Graphing to help students understand their experience of speed, acceleration, and force**

LOCATION:  
Theatre A, Room 103, Ground Floor, Old Arts Building

PRESENTED BY:  
Dr John Cripps Clark,  
Deakin University

**Electricity: The Shocking Truth. This series of pracs is without parallel**

LOCATION:  
Chisholm Theatre, Room 305, L3, Babel Building

PRESENTED BY:  
Mr Spiro Liacos,  
Cheltenham Secondary College

## SESSION 5

**Inspire your students to study STEM at VCE**

LOCATION:  
Cecil Scutt Room, Room 227, L2 Old Arts Building

PRESENTED BY:  
Julia Cleghorn and Jarrod McKenna,  
University of Melbourne

## SESSION 6

**Developing engaging assessment tasks for Units 1 and 2 VCE Physics to build skills for Units 3 and 4 SAC tasks**

LOCATION:  
Chisholm Theatre, Room 305, L3, Babel Building

PRESENTED BY:  
Mrs Maria James, VCAA

## SESSION 7

**Tour Physics of the Future**

LOCATION:  
Meet outside the Laby Ideas Centre, Room 175, Ground Floor (next to the ramp), David Caro (Physics) Building

PRESENTED BY:  
Jackie Bondell,  
School of Physics,  
University of Melbourne

## SESSION BLOCK B:

12:10pm - 12:55pm

## SESSION BLOCK C:

2:00pm - 2:45pm

**Claims, Evidence and Reasoning in Scientific Explanations**

LOCATION:  
Kathleen Fitzpatrick Theatre, Arts West Building

PRESENTED BY:  
Dr Penelope Hale,  
Templestowe College

**How do we connect with our students about climate change?**

LOCATION:  
Chisholm Theatre, Room 305, L3, Babel Building

PRESENTED BY:  
Keith Burrows,  
VicPhysics

**Relativity and Newton's Laws of Motion**

LOCATION:  
Public Lecture Theatre, Room 122, Ground Floor, Old Arts Building

PRESENTED BY:  
Mr Spiro Liacos,  
Cheltenham Secondary College

**Hands-on Electricity Workshop - Sustainability through Understanding**

LOCATION:  
Cecil Scutt Room, Room 227, L2, Old Arts Building

PRESENTED BY:  
Mr Jacob Strickling,  
Australian Christian College and Tiny Science Lab Pty Limited

**2023 SACs for Physics**

LOCATION:  
Middle Theatre, Room 139, L1, Babel Building

PRESENTED BY:  
Michael Rosenbrock,  
Wodonga SSC and Mélissa Malige,  
Jacaranda

**Tour Physics of the Future**

LOCATION:  
Meet outside the Laby Ideas Centre, Room 175, Ground Floor (next to the ramp), David Caro (Physics) Building

PRESENTED BY:  
Jackie Bondell,  
School of Physics,  
University of Melbourne

