

Learn. Energise. Connect. Melbourne 2019

Date: Wednesday 4th December

Venue: Mantra Bell City, 215 Bell Street, Preston, Victoria

Time	Description	Room
7:45 - 8:25	Registration and Arrival Tea & Coffee	Ballroom
8:30 - 9:00	Welcome and Prize Giveaway	Ballroom
9:00 - 9:20	Morning Tea	Marquee
9:30 - 10:45	1A Watch out for Rover! Don't hit my dog!!... In this session, participant teams are challenged to code the TI-Innovator Rover to drive in a variety of scenarios one might experience in daily driving. We will apply proportional reasoning, alternate interior angles, and other maths topics. Integrate maths and code into one engaging learning experience. The best part: No coding experience is required. Presenter: Curtis Brown	Bell 1
	1B TI-Nspire™ CAS & Mathematical Methods Examination 2 2019 In this session we will look at the questions from the 2019 Mathematical Methods Examination 2 and some of the ways in which users of the TI-Nspire™ CAS calculators can benefit and save time in recording solutions and checking answers. Many of the multiple choice questions and parts of extended responses questions can be solved using pre-prepared notes pages. Participants will learn how to create these notes applications which can be used to answer typical examination questions. Presenter: Raymond Rozen	Bell 2
	1C String Art Middle school co-ordinate geometry gets a artistic twist with an exploration of a string art design. Presenter: David Tynan	Bell 3
	1D Constructing useful resources for use in Further/General Maths – Statistics In this session participant will learn how to use the features of the TI-Nspire™ CAS platform to produce resources that take care of the crunching of the statistics in a seamless manner. A focus on univariate and bivariate data will be the aim with a variety of different applications of the calculator being demonstrated and by the end participants will be introduced to the world of widgets! Presenter: Craig Browne	Beijing
	1E Hands on Reflections There are a plethora of ready-made lessons on the TI Australia website to use with Middle School students (linked to the Australian Curriculum) and Senior School state courses. In this hands-on (literally!) workshop participants will be lead through a Middle School Cartesian coordinate and Transformations activity. The aim of this workshop is for participants to leave with the confidence to use this, and similar activities, with their students. ACMMG181: Describe translations, reflections in an axis, and rotations of multiples of 90° on the Cartesian plane using coordinates. Identify line and rotational symmetries. ACMMG143: Introduce the Cartesian coordinate system using all four quadrants. Presenter: John Bament	Vienna
	1F Getting Started with TI-Nspire™ CAS Technology Are you new to TI-Nspire™ technology? Learning the basics will give you the confidence to use this powerful technology in your classroom and provide students with the skills they need to use it effectively and efficiently in their courses. In this session we will explore the Calculator and Graph applications through carefully selected questions applicable to students in years 9 through to 11. Time permitting we will extend our explorations to the Lists and Spreadsheet and Data and Statistics applications. You will learn how to use the TI-Nspire software to help your students and finish the session saying "I didn't know it could do all of that!". Presenter: Rodney Anderson	Dubai
10:55-12:15	2G Driving On Mars: A Coding Problem Have your students wondered how driverless cars work? Have you considered the maths that it takes for vehicles to drive on Mars? In this session, we will code robotic vehicles using mathematics to drive, make turns and complete a challenge. Best part: no coding experience needed! Presenter: Curtis Brown	Bell 1
	2H TI-Nspire™ CAS & Specialist Mathematics Examination 2 2019 In this session we will look at the questions from the 2019 Specialist Examination 2 and ways in which users of the TI-Nspire™ CAS calculators can benefit and save time in recording solutions and checking answers. Many of the multiple choice questions and parts of extended responses questions can be solved using pre-prepared notes pages. Presenter: Raymond Rozen	Bell 2
	2I TI-Nspire™ for Year 12 Mathematical Methods In this session, Hayley will share with participants some of the features of the TI-nspire that she commonly uses when teaching Year 12 Maths Methods. Shortcuts, tips and tricks, as well as useful commands and the ability to create dynamic Notes pages will be covered for each of the Areas of Study – Functions and Graphs, Algebra, Calculus, and Probability and Statistics. Presenter: Hayley Dureau	Bell 3
	2J Whiting Weally Wascally Widgets for GM & FM exams That's not all folks! At this training event last year, I hosted a session with the aims of learning how to use widgets and then workshop the writing of a bank of them. We mostly just got the first bit done. This is a 'make & take' workshop with the absolute aim for all participants to take away a precious arsenal of course-targeted widgets to share with their students. If you came to my session last year, this would be a good follow-up. If you didn't, then you're still most welcome. Best if you already know a bit about making and using widgets. My colleague, Chris Ireson, has made some useful videos on this: https://drive.google.com/drive/folders/1HOnxUyHTLzut7Jg-nJTejP1_j7JkyIwI Presenter: Brian Lannen	Beijing
	2K Does a picture really paint a thousand words? How do you get your students to use their CAS Calculators? How do you ignite that spark? Wow your students with some of the dynamic features on the CAS Calculator so they will say "I didn't know CAS could do that!" or "I understand that now". Your students may even begin to experiment themselves or they may enquire "Can CAS do this?" Experiences from Year 10 classes will be shared that can apply to all Year Levels. Presenter: Chris Ireson	Vienna

10:55-12:15	2L	<p>So, you know the basics – [Getting Started Using TI-Nspire CAS Technology Continued] Would you like to continue extending your knowledge, navigation and experience with TI-Nspire CAS Technology? Whether you're continuing on from the first session (Getting Started Using TI-Nspire) or wanting to create TI-Nspire files to enhance your students' learning experiences, this session is for you! We'll answer your questions and work together to create content for your lessons now and in the future. There is so much that the TI-Nspire can do. Let us unleash the power of the TI-Nspire. Presenter: Rodney Anderson</p>	Dubai
12:15 -12:55	LUNCH (sit down)		
13:00 -14:15	3M	<p>Match the Graph with Robots Interpreting a graph of position vs. time or velocity vs. time is often a challenge for students. What if we could connect these representations with physical activity and the excitement of robotic vehicles? In this session, we will code robotic vehicles to drive paths described in each of these ways. No coding experience needed to get started. Presenter: Curtis Brown</p>	Bell 1
13:00 -14:15	3N	<p>TI-Nspire™ CAS & Mathematical Methods Examination 2 2019 In this session we will look at the questions from the 2019 Mathematical Methods Examination 2 and some of the ways in which users of the TI-Nspire™ CAS calculators can benefit and save time in recording solutions and checking answers. Many of the multiple choice questions and parts of extended responses questions can be solved using pre-prepared notes pages. Participants will learn how to create these notes applications which can be used to answer typical examination questions. Presenter: Raymond Rozen</p>	Bell 2
13:00 -14:15	3O	<p>“What happens if...?” – Using TI-Nspire™ CAS CX data capture to investigate change “What happens if...?” is the question mathematics teachers love to hear from their students – it means they're thinking creatively and extending the fundamentals you're teaching them. In this workshop, the presenter will demonstrate the use of both manual and automatic Data Capture techniques on the Geometry page to explore patterns of distance, area and perimeter measurements. Come along to see how Navigator technology can help you foster independent exploration for your students and maintain engagement beyond the lesson. Suitable for year 9 to 12. Presenter: Roger Wander</p>	Bell 3
13:00 -14:15	3P	<p>Is there anything TI-Nspire™ cannot do in a Further Mathematics class? The attendees of this session will realise that the entire Further Mathematics course content and examination skills can be very conveniently and easily imparted using the TI-Nspire technology along with writing the reference book . The CAS technology provides an excellent opportunity for a flipped learning classroom. Proper and effective use of the TI- Nspire CAS technology has improved student conceptual understanding, learning outcomes and assessment scores. Presenter: Sanjeev Meston</p>	Beijing
13:00-14:15	3Q	<p>The humble triangle has so many possibilities From verifying triangle properties to ticking off coding in maths classes the TI-Nspire™ CAS Calculator applications has them all covered. Teach your students how to use their CAS Calculator efficiently in technology active assessments or even prepare individual projects for each student easily with solutions as well. Come and explore the possibilities and you might just discover your next CAS Calculator investigation on the journey. Presenter: Chris Ireson</p>	Vienna
13:00-14:15	3R	<p>Using TI-Nspire™ CAS in the middle years classroomIn this hands-on workshop a number of activities will be presented that will enhance the teaching and learning in the middle years classroom. The functionality of the CAS will be utilised in applications such as Graphing, Geometry, and Notes pages. Participants with limited CAS experience should benefit from this session. Presenter: Shane Dempsey</p>	Dubai
14:15- 14:30	Tea and Coffee on offer during session change over		
14.25-15:45	4S	<p>Connecting Inequalities, Motion, and Code Interpreting and representing compound inequalities on a number line diagram can be difficult for students. What if we could connect the diagram with physical activity and the engagement of robotic vehicles? In this session we will look at connecting number line diagrams for compound inequalities with logic statements for some simple code. The best part is, no coding experience required! Presenter: Curtis Brown</p>	Bell 1
14.25-15:45	4T	<p>Moving from specific cases to algebraic generalisations – Mathematical Methods Mathematical Methods students often grapple with formulating algebraic equations and relating algebraic generalisations to real-life contexts. In this workshop, we will demonstrate the power of the TI-Nspire to transition students from a visual scenario using a Geometry page, to a specific algebraic representation, and then, ultimately, to an algebraic generalisation. Using this tactic of approaching a problem in a variety of ways, and scaffolding students to reach algebraic generalisations, helps students connect to, and internalise, the algebra. Doing so, they will be better prepared for application problems in their assessment tasks. Presenters: Danijela Draskovic & Russell Brown</p>	Bell 2
14.25-15:45	4U	<p>Constructing useful resources for use in Further/General Maths – Recursion & Financial Mathematics In this session participant will learn how to use the features of the TI-Nspire™ CAS platform to produce resources that explore recursive relationships studied on our courses in a seamless manner. Demonstrating a creative way of how some of the functionality of the calculator can be used in this context will be on display and by the end participants will be introduced to the world of widgets! Presenter: Craig Browne</p>	Bell 3
14.25-15:45	4V	<p>Algorithmic thinking in the middle school Reflections from couple of years of running a Year 10 semester on algorithmic thinking, focussing on coding with TI-Basic. Sample tasks will be presented. Presenter: David Tynan</p>	Beijing
14.25-15:45	4W	<p>Play-do to Page Rank How does Google determine which page to list first, second, third...This activity starts with a hands-on simulation leading to a matrix application. The activity can be adapted to suit both middle and senior school classes. Presenter: Jim Lowe</p>	Vienna
14.25-15:45	4X	<p>Modelling with Data Capture In this session, participants will have the opportunity to learn a variety of modelling skills using TI-Nspire™tools. These skills include inserting images, linking variables, capturing data and then modelling it. The session is geared to teachers of Years 9 to 11 who are looking for ways to enhance their mathematics lessons. The material covered is suitable for both CAS and non-CAS technology. Participants are encouraged to bring their own handheld or laptop using TI-Nspire software. Presenter: Neale Woods</p>	Dubai