

# First Year in Maths (NSW) End of Year Event

UTS Thursday, 13<sup>th</sup> December. CB04.05.430  
Hosted by the School of Mathematical and Physical Sciences, UTS

*Welcome to teachers of first year Uni maths and stats, also high school teachers of maths.*

## Program

9am	<b>Arrival, registration</b>
9.10-9.15	<b>Welcome: Professor Chris Poulton, Discipline Leader, Mathematical Sciences</b>
9.15-10.00	<b>Keynote: Professor Lance Leslie</b>

*“Why Study Statistics in an Era of Big Data and AI?”*

I gained my PhD in Applied Mathematics from Monash University and have since worked in mathematics departments and research institutes including CSIRO, UNSW, and the University of Oklahoma. I joined UTS in July 2017. My research and teaching interests have used applied mathematics and statistics to study many aspects of the geosciences, including big data (e.g. data retrieval, analysis and assimilation), theoretical studies, and computational modelling from severe storms to climate models. Over the past decade or so, I have focused heavily on artificial intelligence techniques (e.g., machine learning); these rely even more profoundly on a sound knowledge of statistics. My research applications include air pollution and water quality in urban environments, agriculture in rural environments, weather and storms coastal and open ocean regions, local to global weather and climate scales, and the many possible climate change impacts. I have been an expert witness in numerous legal cases involving severe weather events. This talk will emphasize the important and growing opportunities for employment for those who have a deep knowledge of statistics and related skills, to encourage more students to consider this field of study.

10.00-10.30	Talk 1 <i>An Introductory course in Statistics for First Year Engineering and Science Undergraduates</i> Jason Stanley
10.30-11.00	Morning tea
11.00-11.20	Talk 2 <i>Using narrative in the teaching of mathematics to undergraduate science students</i> Paul Hernandez Martinez and Nathan Clisby
11.20-11.40	Talk 3 <i>Whiteboard workshops at UTS</i> Murray Elder
11.40-12noon	Talk 4 <i>Providing actionable personal feedback to students in large first year classes</i> Jurgen Schulte
12 noon – 1pm	Lunch
1pm-1.30	Talk 5 <i>Improvements to Mastery Learning Assessment</i> Dani Solina, Greg Cave, Mary Coupland
1.30-2pm	Talk 6 <i>New Foundation Mathematics: challenges and observations</i> Julia Memar
2pm-3pm	Choice: (a) Talk 7. <i>Using R tools for Introductory Statistics</i> Arthur Hung
	Choice: (b) Two or three short presentations
3pm-3.10pm	Please return to CB04.05.430 Close, evaluations, planning for 2019.

Registration details coming soon, (via the First Year in Maths Network). <https://fyimaths.org.au/>

Meanwhile please contact [mary.coupland@uts.edu.au](mailto:mary.coupland@uts.edu.au) if you have any queries.