

CAREERS IN STEM WEBINARS

ROLE MODEL SERIES – Giving students the opportunity to meet Australian scientists and engineers



Dr Heiko Dietrich

How do you become a professional Mathematician?

4 November – 2.00pm (AEDT)

Here are a few activities to show you how important maths is in life. You can do these either before or after the talk.

Watch this video on Why Math is Important

When and where was Abraham Wald born?

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Where was he working when he was called on to work on this aircraft problem?

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The Military didn't take something into account when assessing bullet holes in planes. How did Wald look at it differently? Is there a term for this?

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What are some of the skills that "training" in maths at school can give you?

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Watch this video on how the Königsberg bridge problem changed mathematics. Have a look at the work of Leonhard Euler. What areas of Science and Maths did his work cover?

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Name two places he worked or studied.

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How was Euler able to simplify the problem posed by Carl Ehler?

What is the difference between a node and an edge?

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Would the removal of any bridge fix the problem? Or just the one that was bombed?

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Of the seven bridges, the removal of which bridge would make the shortest Eulerian path?

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Have a look at where Graph Theory is applied today. Can you see any areas that you didn't think involved maths or science?

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Have a think about problems you might be trying to solve that could help with the use of what you now know about Graph Theory.

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Here's another cool riddle you might like to try and solve

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