

# Josef Bisits

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## EDUCATION

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- University of New South Wales** Sydney  
• PhD candidate, supervisor Associate Professor Jan Zika, in the School of Mathematics and Statistics. 2022–current
- University of New South Wales** Sydney  
• Bachelor of Science (Advanced Mathematics) (Honours) Class 1, major in applied mathematics. 2016–2021
- University of Sydney** Sydney  
• Bachelor of Music (Performance), major in double bass performance. 2007–2010

## PUBLICATIONS

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- Bisits, Josef I.**, Stanley, Geoffrey J., Zika, Jan D. 2022: Can we accurately estimate a lateral diffusivity from a single tracer release? *Journal of Physical Oceanography*, DOI: 10.1175/JPO-D-22-0145.1
- Lloyd, Simon D., **Bisits, Josef I.**, Roser, David J., Khan, Stuart J., 2023: Assessing the impact of stormwater contamination events in urban estuaries proposed for bathing, (in prep).

## CONFERENCE PROCEEDINGS, SEMINARS AND WORKSHOPS

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### ORAL PRESENTATIONS

- Bisits, Josef I.**, Can we accurately estimate a lateral diffusivity from a single tracer release? November 28th 2022. *Australian Meteorological and Oceanographic Society annual conference 27th November - 1st December 2022*.

### POSTER PRESENTATIONS

- Bisits, Josef I.**: Can we accurately estimate a lateral diffusivity from a single tracer release? November 9th 2022. *Australian Centre for Excellence in Antarctic Science workshop 8-9th November 2022*.




## RESEARCH EXPERIENCE

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- Research assistant** Sydney  
• Assisted Associate Lecturer Simon Lloyd in historical water quality data analysis and modelling: 2022
  - processing and analysing data used to develop the ‘riverwatch model’ - a predictive water quality model.
- Collaboration with Water Research Centre, UNSW** Sydney  
• Recreational water quality in urban rivers: 2020
  - provided Initial and ongoing advice regarding spatial and temporal analysis of water quality and meteorological data. Acknowledged in: Lloyd, D. S., et al. Swimming in urban rivers: Development of a Bayesian Belief Network to predict health risks to recreational users. *Closed Cycles 2020, Zurich, Switzerland, (2020, Sep 2–4)*.

## PROGRAMMING SKILLS

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- Programming languages**
  -  , :
    - author of [OceanRasterConversions.jl](#)
    - developer of [PassiveTracerFlows.jl](#); and
    - contributor to [FourierFlows.jl](#), [GeophysicalFlows.jl](#) amongst others.

## TEACHING

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- **Mathematics tutor** University of New South Wales  
Classroom and private mathematics tuition: 2021–Current
  - mathematics drop in centre; and
  - mathematics 1A (MATH1131).
- **Double bass** Sydney  
Private and ensemble double bass tuition in Sydney. 2017–2022

## PROFESSIONAL ACTIVITIES

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- **Peer Review**  
Journal of Geophysical Research: Oceans. Ongoing

## ORCHESTRAL EXPERIENCE

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- **Sydney Symphony Orchestra** Sydney  
Regular casual double bassist: 2009–Current
  - full time contract musician for 2015 season and September 2017–September 2018; and
  - Sydney symphony fellowship 2010.
- **Australian Chamber Orchestra** Sydney  
Regular casual double bassist: 2013–Current
  - emerging artist in 2013.
- **Opera Australia Orchestra** Sydney  
Regular casual double bassist. 2016–Current
- **Tasmanian Symphony Orchestra** Tasmania  
Casual double bassist. 2013–2018
- **Ulster Orchestra** Belfast  
Double bassist: Winter 2012
  - held a trial for double bass section leader.
- **Southbank Sinfonia** London  
Double bassist: 2011–2012
  - principal double bassist; and
  - twice appeared as a solo double bassist.

## OUTREACH

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- **Helper for Girls do the Maths!**, *University of New South Wales*. 2022
- **Helper for Experience UNSW Science day**, *University of New South Wales*. 2022
- **Climate @ maths display for UNSW open day**, *University of New South Wales*. 2022
- **Helper for uDASH work experience workshop**, *University of New South Wales*. 2022

## SCHOLARSHIPS AND AWARDS

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- Australian Government Research Training Program Scholarship. 2022–2025
- School of Mathematics and Statistics research scholarship top-up. 2022–2025
- Australian Centre for Excellence in Antarctic Research PhD student. 2022–2025
- Corina d'Hage string scholarship. 2008–2010
- Michael Bannigan scholarship for academic achievement. 2010
- Winner of Sydney Youth Orchestra concerto competition. 2006

## REFERENCES

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- Associate Professor **Jan Zika**, *University of New South Wales, Sydney*. Email: [j.zika@unsw.edu.au](mailto:j.zika@unsw.edu.au)
- Associate Lecturer **Simon Lloyd**, *University of New South Wales, Sydney*. Email: [s.lloyd@unsw.edu.au](mailto:s.lloyd@unsw.edu.au)
- Dr **Geoff Stanley**, *Banting Postdoctoral Fellow, University of Victoria, Canada*. Email: [gstanley@uvic.ca](mailto:gstanley@uvic.ca)