

# Josef Bisits

School of Mathematics and Statistics,  
University of New South Wales.

Phone number: +61 400 348 389  
Email: [jbisits@gmail.com](mailto:jbisits@gmail.com)  
Website: [jbisits.github.io/](https://jbisits.github.io/)  
LinkedIn: [josef-bisits-066253123](https://www.linkedin.com/in/josef-bisits-066253123)  
GitHub: [github.com/jbisits](https://github.com/jbisits)  
ORCID: [0000-0002-6340-4470](https://orcid.org/0000-0002-6340-4470)

## EDUCATION

---

- 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

---

- Bisits, Joesf I.**, Stanley, Geoffrey J., Zika, Jan D., 2023: Can we accurately estimate a lateral diffusivity from a single tracer release? *Journal of Physical Oceanography*, **53**(2), 647–659, DOI: [10.1175/JPO-D-22-0145.1](https://doi.org/10.1175/JPO-D-22-0145.1).
- Lloyd, Simon D., **Bisits, Joesf 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

---

### ORAL PRESENTATIONS

- Bisits, Joesf 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, Joesf 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

---

- 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

---

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

## TEACHING

---

- **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

---

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

## ORCHESTRAL EXPERIENCE

---

- **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

---

- **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

---

- 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

---

- 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)