Josef Bisits

Phone number: +61 400 348 389
Email: jbisits@gmail.com
Website: jbisits.github.io/
LinkedIn: josef-bisits-066253123
GitHub: github.com/jbisits
ORCID: 0000-0002-6340-4470

EDUCATION

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

PUBLICATIONS

- 1. **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
- 2. 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

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

• Research assistant

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

- julia, R, LATEX:
 - author of OceanRasterConversions.jl
 - developer of PassiveTracerFlows.jl; and
 - contributor to FourierFlows.jl, ${\tt GeophysicalFlows.jl}$ 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

- $\bullet \ \, \textbf{Associate Professor Jan Zika}, \ \textit{University of New South Wales, Sydney}.$
- Associate Lecturer Simon Lloyd, University of New South Wales, Sydney.
- $\bullet \ \, \mathbf{Dr} \,\, \mathbf{Geoff} \,\, \mathbf{Stanley}, \, \textit{Banting Postdoctoral Fellow, University of Victoria, Canada}.$

Email: j.zika@unsw.edu.au
Email: s.lloyd@unsw.edu.au
Email: gstanley@uvic.ca