Dear all

In this week's digest:

- ANU has two post-doc positions available, closing date for applications is 10 July:
 - Research Fellow (level B \$103481-\$117736) Hydrodynamic modelling of floods https://jobs-anu-edu-au.virtual.anu.edu.au/cw/en/job/546113/research-fellow
 - Postdoc/Research Fellow (Level A/B \$76271-\$117736) Social and Institutional dimensions of community flood resilience <u>https://jobs-anu-edu-au.virtual.anu.edu.au/cw/en/job/546109/postdoctoral-research-fellow</u>
- The Brain and Mind Centre at the University of Sydney has a post-doc position in system dynamics modelling available, closing date for applications is 4 July <u>https://www.timeshighereducation.com/unijobs/listing/298563/systems-modelling-postdoctoral-research-fellow/?trackid=10&utm_source=the-jobs-service</u>
- The University of Southern Queensland has a post-doc position for soil and water systems modelling at the Centre for Sustainable Agricultural Systems, closing date for applications is 10 July
 <u>https://usq.nga.net.au/cp/index.cfm?event=jobs.checkJobDetailsNewJobBoardApplication&</u> <u>returnToEvent=jobs.home&jobID=38257309-AADA-7A10-5E38-</u> <u>C8A580C4D935&audienceTypeCode=EXT&jobAdID=757719B1-330B-4DFF-A775-</u> <u>BB694845EFF1&UseAudienceTypeLanguage=1</u>
- Members may be interested in these two mathematical conferences:
 - Statistics and Mathematical Modelling in Combination
 Dates: 16–18 November 2022
 Venue: La Trobe University
 Web: <u>https://www.mathematics.org.au/sys/public/home.php?conf_id=57</u>
 - Forum "Math-for-Industry" 2022 Mathematics of Public Health and Sustainability Dates: 21–24 November 2022 Venue: La Trobe University City Campus (Level 2, 360 Collins Street, Melbourne, Australia)
 Web: https://apcmfi.org/fmfi2022/index.html

Deterministic modellers and statisticians have a lot to be gained by working as a team in which both types of approaches are used. The combination of statistics and classical dynamics has long been a fertile field, tracing back to statistical mechanics from the end of the 19th century and stochastic differential equations from the 1920s. The need to combine the two modelling approaches has never been greater and neither has the opportunity for affordable high-performance computation. During the COVID-19 pandemic, agreement has been found between agent-based models and differential compartment equations in modelling infection numbers. Each approach gives confidence to the other, and this suggests scope for new hybrid models.

If you would like something included in this digest, please email it to office@mssanz.org.au

Kind regards, Karen