

## Past President Report - Season 2022-2023

Thomas Hillen

### MSI (Mathematics in Science and Industry)

- **Discussion with Springer:** I had a discussion with the Math-editor of Springer, Lynn Brandon. She immediately understood the challenges of a new journal and she doubted that we can start such a journal alone. She suggested to team up with the Springer journal: “Journal of Mathematics in Industry”. We explored this option but decided that it would be too costly for CAIMS.
- **AIMS Mathematics:** AIMS continues to support us through inclusion in AIMS Mathematics. The process runs very smoothly. We paid AIMS \$3000 for the 2019 issue and \$3000 for the 2021 issues (nothing for 2020). Our agreement with AIMS ended in 2022 and we are currently re-negotiating the terms.
- **Editors in Chief:** I stepped down as Editor in Chief in January 2022 due to other commitments. The current Chief Editors are: Ray Spiteri, Rebecca Tyson, and Sue Ann Campbell.
- **MSI Volume 4 got published:** (see appendix to this report)

### ICIAM

- We started discussions to bid for one of the future ICIAM meetings to come to Canada, possibly 2031 or 2034. So far I talked with the City of Edmonton, the CAIMS board, SIAM, and PIMS, and there is strong support for this idea. We will continue this discussion.

### Other items:

- I worked with Rebecca and Morgan on a new web service for CAIMS.
- We decided to end the GAP connector service. It was not used very often.
- No new contributions for the CAIMS blog in the season 2022-2023.
- The joint CAIMS/CMS Institutional membership option gave us a handfull of new institutional members.
- The CAIMS/CMS book series is doing very well.

## Personal statement:

*It was a great experience to work for CAIMS as president (elect, current, past) for the past 6 years. I met wonderful people in the Executive Committee, the Board, and among CAIMS members and it was a pleasure to work with all of you. I am proud of what we achieved in the last 6 years, we started new publication venues, we navigated the difficult waters of a world-wide pandemic, and we showcased the strength of Applied Mathematics in Canada. Go CAIMS!*

Thomas Hillen (June 2023)

## Appendix: MSI Volume 4

Special issue: The Modelling of SARS-CoV-2

Editors: **Morgan Craig** (Université de Montréal), **Thomas Hillen** (U Alberta), **Rebecca Tyson** (UBC – Okanagan), **Huaiping Zhu** (York U)

The Modelling of SARS-Cov-2 and the epidemiology of COVID-19 has led to interesting and non-trivial mathematical challenges. Here we collect some relevant research on the dynamics of SARS-CoV-2 and its management.

Sara J Hamis, Fiona R Macfarlane. **A single-cell mathematical model of SARS-CoV-2 induced pyroptosis and the effects of anti-inflammatory intervention.**  
AIMS Mathematics 2021, Volume 6, Issue 6: 6050-6086. doi: [10.3934/math.2021356](https://doi.org/10.3934/math.2021356)

Rebecca C. Tyson, Noah D. Marshall, Bert O. Baumgaertner. **Transient prophylaxis and multiple epidemic waves.**  
AIMS Mathematics 2022, Volume 7, Issue 4: 5616-5633. doi: [10.3934/math.2022311](https://doi.org/10.3934/math.2022311)

Maria M. Martignoni, P. Rahman, A. Hurford, **Rotational worker vaccination provides indirect protection to vulnerable groups in regions with low COVID-19 prevalence.**  
AIMS Mathematics 2022, Volume 7, Issue 3: 3988-4003. doi: [10.3934/math.2022220](https://doi.org/10.3934/math.2022220)

Geoffrey McGregor, Jennifer Tippet, Andy T.S. Wan, Mengxiao Wang, Samuel W.K. Wong, **Comparing regional and provincial-wide COVID-19 models with physical distancing in British Columbia.**  
AIMS Mathematics 2022, Volume 7, Issue 4: 6743-6778. doi: [10.3934/math.2022376](https://doi.org/10.3934/math.2022376)