

# List of publications

Stefan Engblom

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## SUBMITTED

- [S1] E. Blom and S. Engblom. DLCM: a versatile multi-level solver for heterogeneous multicellular systems, 2025.

## REFEREED

- [R1] G. Menz and S. Engblom. Modelling population-level Hes1 dynamics: Insights from a multi-framework approach. *Accepted for publication in Bull. Math. Biol.*, 2025.
- [R2] E. Blom and S. Engblom. Morphological stability for *in silico* models of avascular tumors. *Bull. Math. Biol.*, 86(7):75, 2024. [doi:10.1007/s11538-024-01297-x](https://doi.org/10.1007/s11538-024-01297-x).
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- [R9] S. Widgren, P. Bauer, R. Eriksson, and S. Engblom. SimInf: An R package for data-driven stochastic disease spread simulations. *J. Stat. Softw.*, 91(12):1–42, 2019. [doi:10.18637/jss.v091.i12](https://doi.org/10.18637/jss.v091.i12).
- [R10] J. Lindén, P. Bauer, S. Engblom, and B. Jonsson. Exposing inter-process information for efficient PDES of spatial stochastic systems on multicores. *ACM Trans. Model. Comput. Simul.*, 29(2): 11:1–11:25, 2019. [doi:10.1145/3301500](https://doi.org/10.1145/3301500).

- [R11] J. Liu, G. Schot, and S. Engblom. Supervised classification methods for flash X-ray single particle diffraction imaging. *Opt. Express*, 27(4):3884–3899, 2019. [doi:10.1364/OE.27.003884](https://doi.org/10.1364/OE.27.003884).
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- [P2] F. Wrede, R. Eriksson, R. Jiang, L. Petzold, S. Engblom, A. Hellander, and P. Singh. Robust and integrative Bayesian neural networks for likelihood-free parameter inference. In *2022 International Joint Conference on Neural Networks (IJCNN)*, pages 1–10, 2022. [doi:10.1109/IJCNN55064.2022.9892800](https://doi.org/10.1109/IJCNN55064.2022.9892800).

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- [P10] S. Engblom and V. Sunkara. Preconditioned Metropolis sampling as a strategy to improve efficiency in posterior exploration. *IFAC-PapersOnLine*, 49(26):89–94, 2016. Foundations of Systems Biology in Engineering, FOSBE 2016, [doi:10.1016/j.ifacol.2016.12.108](https://doi.org/10.1016/j.ifacol.2016.12.108).
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## SOFTWARE

*Publicly available.*

- [SW1] R. Marin, H. Runvik, A. Medvedev, and S. Engblom, 2022–. Available at <https://github.com/robineriksson/Bayesian-Monitoring-of-COVID-19-in-Sweden>.
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## POPULAR & OPINION

- [PO1] T. Fall, S. Engblom, T. Monstad, Y. Ekström, V. van Zoest, B. Kennedy, A. Székely, and M. Martinell. CRUSH COVID — ett tvärvetenskapligt samarbetsprojekt. In *Qvintensen* No 2, 2023. Available at <https://statistikframjandet.se/qvintensen/qvintensen-2-2023/>.
- [PO2] K. Forsberg, T. Fall, and S. Engblom. Viktigt att skilja på munskydd och andningskydd. In *Läkartidningen* December 23, 2021. Available at <https://lakartidningen.se/opinion/debatt/2021/12/viktigt-att-skilja-pa-munskydd-och-andningskydd/>.
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## REPORTS

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