

# Raphaël Tinarrage - Publications

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## Journal articles

- 04/2023 **Recovering the homology of immersed manifolds**  
arXiv: <https://arxiv.org/abs/1912.03033>  
Discrete and Computational Geometry (<https://link.springer.com/article/10.1007/s00454-022-00409-5>)
- 03/2022 **Computing persistent Stiefel-Whitney classes of line bundles**  
arXiv: <https://arxiv.org/abs/2005.12543>  
Journal of Applied and Computational Topology (<https://link.springer.com/article/10.1007/s41468-021-00080-4>)
- 06/2020 **DTM-based filtrations**, with Hirokazu Anai, Frédéric Chazal, Marc Glisse, Yuichi Ike, Hiroya Inakoshi and Yuhei Umeda.  
arXiv: <https://arxiv.org/abs/1811.04757>  
Symposium Abel 2018 ([https://link.springer.com/chapter/10.1007/978-3-030-43408-3\\_2](https://link.springer.com/chapter/10.1007/978-3-030-43408-3_2)) and SoCG conference 2019 (<https://drops.dagstuhl.de/opus/volltexte/2019/10462/>)

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## Conference articles

- 09/2022 **O impacto da Súmula Vinculante 26 na diminuição de demanda similar no STF: uma análise quantitativa por modelos de ML**, with Beatriz S. Chagas and Carla M. Damian  
Paper: [https://raphaeltinarrage.github.io/files/Paper\\_CONPEDI\\_Quantitativa.pdf](https://raphaeltinarrage.github.io/files/Paper_CONPEDI_Quantitativa.pdf)  
XI Encontro Internacional do CONPEDI (<http://site.conpedi.org.br/publicacoes/129by0v5/gg2as8t1/0d71Wwx2sWUgr61q.pdf>)
- 09/2022 **Progressão de regime em crimes hediondos no Supremo Tribunal Federal: uma análise empírica pela Súmula Vinculante 26**, with Ana Clara M. Jaccoud and Pedro B. de Oliveira  
Paper: [https://raphaeltinarrage.github.io/files/Paper\\_CONPEDI\\_Empirica.pdf](https://raphaeltinarrage.github.io/files/Paper_CONPEDI_Empirica.pdf)  
XI Encontro Internacional do CONPEDI (<http://site.conpedi.org.br/publicacoes/129by0v5/502849so/6o53sVpwaxV5352U.pdf>)

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## Preprints

- 07/2024 **Empirical analysis of Binding Precedent efficiency in the Brazilian Supreme Court via Similar Case Retrieval**, with Henrique Ennes, Lucas E. Resck, Lucas T. Gomes, Jean R. Ponciano and Jorge Poco  
<https://arxiv.org/abs/2407.07004>
- 01/2024 **Train-Free Segmentation in MRI with Cubical Persistent Homology**, with Anton François  
<https://arxiv.org/abs/2401.01160>
- 06/2023 **LieDetect: Detection of representation orbits of compact Lie groups from point clouds**, with Henrique Ennes  
<https://arxiv.org/abs/2309.03086>
- 04/2023 **TDANetVis: Suggesting temporal resolutions for graph visualization using zigzag PH**, with Jorge Poco, Agma J. M. Traina, Jean Roberto Ponciano and Cláudio Linhares  
<https://arxiv.org/abs/2304.03828>
- 09/2022 **Simplicial approximation to CW complexes in practice**  
<https://arxiv.org/abs/2112.07573>

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