

Publications and Presentations

1. T. Shaw, P. Worden, **O. Olagbemi**, (2025). ParDcuhre: A Scalable Parallel Solution for Multivariate Integration with CUDA. In: H.R. Arabnia, L. Deligiannidis, F. Shenavarmasouleh, S. Amirian, F. Ghareh Mohammadi (eds) Computational Science and Computational Intelligence. CSCI 2024. Communications in Computer and Information Science, vol 2506. Springer, Cham. https://doi.org/10.1007/978-3-031-95130-5_5
2. **O. Olagbemi**; "Posture in Practice: Applying Machine Learning in Research for Safer Nursing Care"; **Oral** presentation to the Hope Academy of Senior Professionals (HASP); Hope College, Holland, MI (July 15, 2025)
3. E. Sanchez, G. Battaglia, B. Odle (Ph.D., advising), **O. Olagbemi** (advising and presenting); "Explainability of machine learning models in the classification of patient-handling techniques of novice caregivers"; **Poster** presentation at American Society of Biomechanics 2024 (National Conference); Madison, Wisconsin (August 6, 2024)
4. B. Odle, **O. Olagbemi**; Classifying Patient-Handling Technique to Reduce Risk of Musculoskeletal Injury in Nursing Students; **Joint** preliminary (virtual) **oral** presentation to RESTORE Center Group of Stanford University with regard to funded ongoing research project (July 11, 2023)
5. N. Tran, H. Kring, **O. Olagbemi** (presenting), B. Odle (presenting); Reducing Risk of Musculoskeletal Injury with Biomechanical and Computational Approaches to Classify Patient-Handling Tasks and Posture; **Poster** Presentation at [NSF DARE \(Disability and Rehabilitation Engineering\) 2023 Conference](#); University of Southern California, Los Angeles (March 4, 2023)
6. E. de Doncker, F. Yuasa, **O. Olagbemi**, T. Ishikawa; Large Scale Automatic Computations for Feynman Diagrams with up to Five Loops; Computational Science and Its Applications – ICCSA 2020. (ICCSA 2020) Lecture Notes in Computer Science, vol 12253. Springer, Cham. https://doi.org/10.1007/978-3-030-58814-4_11
7. **O. Olagbemi** (poster); "From Instructor-Driven Teaching to Student-Focused Learning – a Personal Narrative"; STEM Instructional Graduate Teaching Assistants Program, Western Michigan University; <https://scholarworks.wmich.edu/stem-gta-posters/16> (Fall 2020)
8. **O. Olagbemi**; Scalable Algorithms and Hybrid Parallelization Strategies for Multivariate Integration with PARADAPT and CUDA; Ph.D. Thesis, Western Michigan University (2019): <https://scholarworks.wmich.edu/dissertations/3524/>
9. **O. Olagbemi** and E. de Doncker, "Scalable Algorithms for Multivariate Integration with ParAdapt and CUDA," 2019 International Conference on Computational Science and Computational Intelligence (CSCI), Las Vegas, NV, USA, 2019, pp. 481-486, doi: 10.1109/CSCI49370.2019.00093; <https://ieeexplore.ieee.org/document/9071198>
10. E. de Doncker, F Yuasa, K. Kato, T. Ishikawa, J. Kapenga, **O. Olagbemi**, Regularization with numerical Extrapolation for Finite and UV-Divergent Multi-loop Integrals, Journal of Physics: Conf. Ser. (JPCS) (2017); <https://www.sciencedirect.com/science/article/pii/S0010465517303703>, arXiv:1702.04904v2 [hep-ph], <https://arxiv.org/abs/1702.04904>
11. Elise de Doncker, Fukuko Yuasa, Tadashi Ishikawa, John Kapenga, and **Fola Olagbemi** (presenting). Adaptive Integration and Singular Boundary Transformations. Procedia Computer Science (2016), <https://doi.org/10.1016/j.procs.2016.05.462>

12. K. Kato, E. de Doncker, T. Ishikawa, J. Kapenga, **O. Olagbemi** and F. Yuasa, High Performance and Increased Precision Techniques for Feynman Loop Integrals, Journal of Physics: Conf. Ser. (JPCS), IOP Series 762 (2016), 012070, <http://iopscience.iop.org/article/10.1088/1742-6596/762/1/012070>
13. E. de Doncker, F. Yuasa and **O. Olagbemi**, Adaptive Integration for 3-loop Feynman Diagrams with Massless Propagators, Procedia Computer Science **51** (2015), pp. 1333-1342, <http://www.sciencedirect.com/science/article/pii/S1877050915011266>, [doi:10.1016/j.procs.2015.05.318](https://doi.org/10.1016/j.procs.2015.05.318)
14. E. de Doncker, J. Kapenga, F. Yuasa and **O. Olagbemi**. Scalable Software for Multivariate Integration on Hybrid Platforms. Journal of Physics: Conference Series (JPCS), IOP Series **640** (2015), 012062, [doi:10.1088/1742-6596/640/1/012062](https://doi.org/10.1088/1742-6596/640/1/012062)
15. E. de Doncker, F. Yuasa, K. Kato, T. Ishikawa, **O. Olagbemi**. Automatic Numerical Methods for Feynman Integrals through 3-loop. Journal of Physics: Conference Series (JPCS), IOP Series 608 (2015), <http://iopscience.iop.org/article/10.1088/1742-6596/608/1/012071/meta>
16. **O. Olagbemi** (presenting), and E. de Doncker (advising). Adaptive Task Partitioning with ParInt. **Poster** at the 7th annual WMU Research and Creative Activities Poster Day, Kalamazoo, Michigan; https://scholarworks.wmich.edu/grad_research_posters/33/ (April 5, 2013)