

PUBLICATIONS

71. **C. Kim, M. Mourigal**, “Emulation of quantum correlations by classical dynamics in a spin-1/2 Heisenberg chain” *Submitted* (March 2025), <https://arxiv.org/abs/2503.19975>.
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69. D. Dahlbom, H. Zhang, C. Miles, **S. Quinn**, A. Niraula, B. Thipe, M. Wilson, S. Matin, H. Mankad, S. Hahn, D. Pajerowski, S. Johnston, Z. Wang, **H. Lane**, Y. W. Li, X. Bai, **M. Mourigal**, C. D. Batista, and K. Barros, “Sunny.jl: A Julia Package for Spin Dynamics”, *Submitted* (February 2025), <https://arxiv.org/abs/2502.14167>.
68. **C. Kim, O. Vilella**, Youjin Lee, Pyeongjae Park, Yeochan An, Woonghee Cho, Matthew B. Stone, Alexander I. Kolesnikov, Shinichiro Asai, Shinichi Itoh, Takatsugu Masuda, Sakib Matin, Sujin Kim, Sung-Jin Kim, **M. Mourigal** and Je-Geun Park “Higher-order skyrmion crystal in van der Waals Kitaev triangular antiferromagnet NiI₂”, *Submitted* (February 2025), <https://arxiv.org/pdf/2501.13095>.
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66. **H. Lane, M. Mourigal**, “Thermally-induced mimicry of quantum cluster excitations and implications for the magnetic transition in FePX₃”, *Submitted* (January 2025); <https://arxiv.org/abs/2405.17308>.
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62. **H. Lane**, H. Zhang, D. Dahlbom, **S. Quinn**, R. D. Somma, **M. Mourigal**, C. D. Batista, and K. Barros “Kernel Polynomial Method for Linear Spin Wave Theory”, *SciPost* **17**, 145 (2024), [\[DOI\]](#).
61. G. E. Granroth, **M. Daum**, A. A. Aczel, T. J. Williams, B. Winn, J. A. Fernandez-Baca, **M. Mourigal**, M. D. Lumsden, “Incident Beamline Design for a Modern Cold Triple Axis Spectrometer at the High Flux Isotope Reactor”, *Nucl. Instrum. Methods Phys. Res. A* **1064**, 169440 (2024), [\[DOI\]](#).
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