

PUBLICATION LIST

My full listing on INSPIRE-HEP is available [here](#).

1. *Time-integrated directional detection of dark matter*  
C. A. J. O'Hare, **B. J. Kavanagh**, A. M. Green  
[Phys. Rev. D 96, 083011 \(2017\)](#), [arXiv:1708.02959](#)
2. *Prospects for determining the particle/antiparticle nature of WIMP dark matter with direct detection experiments*  
**B. J. Kavanagh**, F. S. Queiroz, W. Rodejohann, C. E. Yaguna  
[J. High Energ. Phys. \(2017\) 2017: 59](#), [arXiv:1706.07819](#)  
Code available [here](#)
3. *Probing Leptophilic Dark Sectors with Hadronic Processes*  
F. D'Eramo, **B. J. Kavanagh**, P. Panci  
[Phys. Lett. B 771 \(2017\) 339-348](#), [arXiv:1702.00016](#)
4. *Signatures of Earth-scattering in the direct detection of Dark Matter*  
**B. J. Kavanagh**, R. Catena, C. Kouvaris  
[JCAP 01 \(2017\) 012](#), [arXiv:1611.05453](#)  
Code available [here](#)
5. *Reconstructing the three-dimensional local dark matter velocity distribution*  
**B. J. Kavanagh**, C. A. J. O'Hare  
[Phys. Rev. D 94, 123009 \(2016\)](#), [arXiv:1609.08630](#)
6. *You can hide but you have to run: direct detection with vector mediators*  
F. D'Eramo, **B. J. Kavanagh**, P. Panci  
[JHEP 08 \(2016\) 111](#), [arXiv:1605.04917](#)  
Code available [here](#)
7. *A review of the discovery reach of directional Dark Matter detection*  
F. Mayet, A. M. Green, J. B. R. Battat, J. Billard, N. Bozorgnia, G. B. Gelmini, P. Gondolo,  
**B. J. Kavanagh**, S. K. Lee, D. Loomba J. Monroe, B. Morgan, C. A. J. O'Hare, A. H. G. Peter,  
N. S. Phan, S. E. Vahsen  
[Physics Reports 627 \(2016\) 1](#), [arXiv:1602.03781](#)  
Highlighted in [Physics Reports](#)
8. *Re-examining the significance of the 750 GeV diphoton excess at ATLAS*  
**B. J. Kavanagh**  
[arXiv pre-print \(2016\)](#), [arXiv:1601.07330](#)  
Featured on [Symmetries](#) and [Résonances](#)
9. *New directional signatures from the non-relativistic effective field theory of dark matter*  
**B. J. Kavanagh**  
[Phys. Rev. D 92, 023513 \(2015\)](#), [arXiv:1505.07406](#)
10. *Discretising the velocity distribution for directional dark matter experiments*  
**B. J. Kavanagh**  
[JCAP 07 \(2015\) 019](#), [arXiv:1502.04224](#)
11. *Probing WIMP particle physics and astrophysics with direct detection and neutrino telescope data*  
**B. J. Kavanagh**, M. Fornasa, A. M. Green  
[Phys. Rev. D. 91, 103533 \(2015\)](#), [arXiv:1410.8051](#)
12. *Parametrizing the local dark matter speed distribution: a detailed analysis*  
**B. J. Kavanagh**  
[Phys. Rev. D 89, 085026 \(2014\)](#), [arXiv:1312.1852](#)

13. *WIMP physics with ensembles of direct-detection experiments*  
A. H. G. Peter, V. Gluscevic, A. M. Green, **B. J. Kavanagh**, S. K. Lee  
[Phys. Dark Universe 5-6 \(2014\) 45-74](#), [arXiv:1310.7039](#)
14. *Model independent determination of the dark matter mass from direct detection experiments*  
**B. J. Kavanagh** and A. M. Green  
[Phys. Rev. Lett. 111, 031302 \(2013\)](#), [arXiv:1303.6868](#)  
Featured in [Phys.org](#)
15. *Improved determination of the WIMP mass from direct detection data*  
**B. J. Kavanagh** and A. M. Green  
[Phys. Rev. D 86, 065027 \(2012\)](#), [arXiv:1207.2039](#)