# Pat Scott

## List of Publications

**Available from www.physics.mcgill.ca/~patscott/publications**
**Summary (Sep 5 2012, NASA ADS): 28 publications, 1214 citations, h-index: 13**
**(Two most siginficant papers are marked in bold and given an asterisk.)**

### Journal articles

[1] P. Scott, C. Savage, J. Edsjö, and the IceCube Collaboration: R. Abbasi et al., *Use of event-level neutrino telescope data in global fits for theories of new physics*, *JCAP* (2012) accepted, [arXiv:1207.0810].

[2] P. Scott, A. I. Cowan, and C. Stricker, *Quantifying impacts of short-term plasticity on neuronal information transfer*, *Phys. Rev. E* **85** (2012) 041921, [arXiv:1204.3270].

[3] C. Strege, R. Trotta, G. Bertone, A. H. G. Peter, and P. Scott, *Fundamental statistical limitations of future dark matter direct detection experiments*, *Phys. Rev. D* **86** (2012) 023507, [arXiv:1201.3631].

[4] T. Bringmann, P. Scott, and Y. Akrami, *Improved constraints on the primordial power spectrum at small scales from ultracompact minihalos*, *Phys. Rev. D* **85** (2012) 125027, [arXiv:1110.2484].

[5] P. Scott, A. Venkatesan, E. Roebber, P. Gondolo, E. Pierpaoli, and G. Holder, *Impacts of Dark Stars on Reionization and Signatures in the Cosmic Microwave Background*, *ApJ* **742** (2011) 129, [arXiv:1107.1714].

[6] J. Ripken, J. Conrad, and P. Scott, *Implications for constrained supersymmetry of combined H.E.S.S. observations of dwarf galaxies, the Galactic halo and the Galactic centre*, *JCAP* **04** (2011) 012, [arXiv:1012.3939].

[7] Y. Akrami, C. Savage, P. Scott, J. Conrad, and J. Edsjö, *How well will ton-scale dark matter direct detection experiments constrain minimal supersymmetry?*, *JCAP* **4** (2011) 12, [arXiv:1011.4318].

[8] Y. Akrami, C. Savage, P. Scott, J. Conrad, and J. Edsjö, *Statistical coverage for supersymmetric parameter estimation: a case study with direct detection of dark matter*, *JCAP* **7** (2011) 2, [arXiv:1011.4297].

[9] E. Zackrisson, P. Scott, C.-E. Rydberg, F. Iocco, S. Sivertsson, G. Östlin, G. Mellema, I. T. Iliev, and P. R. Shapiro, *Observational constraints on supermassive dark stars*, *MNRAS* **407** (2010) L74–L78, [arXiv:1006.0481].

[10] E. Zackrisson, P. Scott, C.-E. Rydberg, F. Iocco, B. Edvardsson, G. Östlin, S. Sivertsson, A. Zitrin, T. Broadhurst, and P. Gondolo, *Finding High-redshift Dark Stars with the James Webb Space Telescope*, *ApJ* **717** (2010) 257–267, [arXiv:1002.3368].

[11] Y. Akrami, P. Scott, J. Edsjö, J. Conrad, and L. Bergström, *A profile likelihood analysis of the Constrained MSSM with genetic algorithms*, *JHEP* **4** (2010) 57, [arXiv:0910.3950].

[12] *P. Scott, J. Conrad, J. Edsjö, L. Bergström, C. Farnier, and Y. Akrami, ***Direct constraints on minimal supersymmetry from Fermi-LAT observations of the dwarf galaxy Segue 1***, *JCAP* **1** (2010) 31, [arXiv:0909.3300].

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[13] *M. Asplund, N. Grevesse, A. J. Sauval, and P. Scott, ***The chemical composition of the Sun***, *ARA&A* **47** (2009) 481–522, [arXiv:0909.0948].

[14] P. Scott and S. Sivertsson, *Gamma rays from ultracompact primordial dark matter minihalos*, *Phys. Rev. Lett.* **103** (2009) 211301, [arXiv:0908.4082].

[15] P. Scott, M. Asplund, N. Grevesse, and A. J. Sauval, *On the Solar Nickel and Oxygen Abundances*, *ApJ* **691** (2009) L119–L122, [arXiv:0811.0815].

[16] P. Scott, M. Fairbairn, and J. Edsjö, *Dark stars at the Galactic Centre - the main sequence*, *MNRAS* **394** (2009) 82–104, [arXiv:0809.1871].

[17] M. Fairbairn, P. Scott, and J. Edsjö, *The zero age main sequence of WIMP burners*, *Phys. Rev. D* **77** (2008) 047301, [arXiv:0710.3396].

[18] P. Scott, M. Asplund, N. Grevesse, and A. J. Sauval, *Line formation in solar granulation. VII. CO lines and the solar C and O isotopic abundances*, *A&A* **456** (2006) 675–688, [astro-ph/0605116].

## Other refereed contributions (proceedings)

[19] P. Scott, T. Bringmann, and Y. Akrami, *Constraints on small-scale cosmological perturbations from gamma-ray searches for dark matter*, in *Proceedings of TAUP 2011* (G. Raffelt et. al., ed.), *J. Phys. Conf. Series* **375** (2012) 032012, [arXiv:1205.1432].

[20] C. Blázas *et al.*, *DLHA: Dark Matter Les Houches Agreement*, in *Les Houches 2011: Physics at TeV Colliders New Physics Working Group Report* (Brooijmans, G. et. al., ed.) (2012) [arXiv:1203.1488].

[21] P. Scott, *Dark stars: structure, evolution and impacts upon the high-redshift Universe*, in *Cosmic Radiation Fields: Sources in the early Universe* (M. Raue, T. Kneiske, D. Horns, D. Elsaesser, & P. Hauschildt, ed.) (2011) *PoS*(**CRF 2010**)021, [arXiv:1101.1029].

[22] C. E. Rydberg, E. Zackrisson, and P. Scott, *Can the James Webb Space Telescope detect isolated population III stars?*, in *Cosmic Radiation Fields: Sources in the early Universe* (M. Raue, T. Kneiske, D. Horns, D. Elsaesser, & P. Hauschildt, ed.) (2011) *PoS*(**CRF 2010**)026, [arXiv:1103.1377].

[23] N. Grevesse, M. Asplund, A. J. Sauval, and P. Scott, *The New Solar Composition and the Solar Metallicity*, in *The Sun, the Solar Wind, and the Heliosphere* (M. P. Miralles and J. Sánchez Almeida, eds.), *IAGA Special Sopron Book Series* **4** (2011) 51–60.

[24] N. Grevesse, M. Asplund, A. Sauval, and P. Scott, *The chemical composition of the sun*, in *10th International Colloquium on Atomic Spectra and Oscillator Strengths for Astrophysical and Laboratory Plasmas*, *Can. J. Phys.* **89** (2011) 327–331.

[25] N. Grevesse, M. Asplund, A. J. Sauval, and P. Scott, *The chemical composition of the Sun*, in *Synergies between solar and stellar modelling*, *Ap&SS* **328** (2010) 179–183.

[26] P. Scott, J. Edsjö, and M. Fairbairn, *The DarkStars code: a publicly available dark stellar evolution package*, in *Dark Matter in Astroparticle and Particle Physics: Dark 2009* (H. V. Klapdor-Kleingrothaus & I. V. Krivosheina, ed.), World Scientific, Singapore (2010) 320–327, [arXiv:0904.2395].

[27] P. Scott, M. Fairbairn, and J. Edsjö, *Impacts of WIMP dark matter upon stellar evolution: main-sequence stars*, in *Identification of dark matter 2008* (2008) *PoS*(**idm2008**)073, [arXiv:0810.5560].

[28] P. Scott, J. Edsjö, and M. Fairbairn, *Low mass stellar evolution with WIMP capture and annihilation*, in *Dark Matter in Astroparticle and Particle Physics: Dark 2007* (H. K. Klapdor-Kleingrothaus and G. F. Lewis, eds.), World Scientific, Singapore (2008) 387–392, [arXiv:0711.0991].

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