Pat Scott

List of Publications

Summary (Jul 15 2014, NASA ADS): 43 publications, 2384 citations, h-index: 18

Journal articles

[1] P. Scott, N. Grevesse, M. Asplund, A. J. Sauval, K. Lind, Y. Takeda, R. Collet, R. Trampedach, and W. Hayek, *The elemental composition of the Sun I. The intermediate mass elements Na to Ca*, *A&A submitted* (2014) [arXiv:1405.0279].

[2] P. Scott, M. Asplund, N. Grevesse, M. Bergemann, and A. J. Sauval, *The elemental composition of the Sun II. The iron group elements Sc to Ni*, *A&A submitted* (2014) [arXiv:1405.0287].

[3] N. Grevesse, P. Scott, M. Asplund, and A. J. Sauval, *The elemental composition of the Sun III. The neutron capture elements Cu to Th*, *A&A submitted* (2014) [arXiv:1405.0288].

[4] M. Pierre, J. M. Siegal-Gaskins, and P. Scott, *Sensitivity of CTA to dark matter signals from the Galactic Center*, *JCAP* **6** (2014) 24, [arXiv:1401.7330].

[5] A. C. Vincent and P. Scott, *Thermal conduction by dark matter with velocity and momentum-dependent cross-sections*, *JCAP* **4** (2014) 19, [arXiv:1311.2074].

[6] J. M. Cline, K. Kainulainen, P. Scott, and C. Weniger, *Update on scalar singlet dark matter*, *Phys. Rev. D* **88** (2013) 055025, [arXiv:1306.4710].

[7] J. M. Cline and P. Scott, *Dark matter CMB constraints and likelihoods for poor particle physicists*, *JCAP* **3** (2013) 44, [arXiv:1301.5908].

[8] S. Shandera, A. L. Erickcek, P. Scott, and J. Y. Galarza, *Number counts and non-Gaussianity*, *Phys. Rev. D* **88** (2013) 103506, [arXiv:1211.7361].

[9] H. Silverwood, P. Scott, M. Danninger, C. Savage, J. Edsjö, J. Adams, A. M. Brown, and K. Hultqvist, *Sensitivity of IceCube-DeepCore to neutralino dark matter in the MSSM-25*, *JCAP* **3** (2013) 27, [arXiv:1210.0844].

[10] E. Zackrisson, *et al.*, *Hunting for dark halo substructure using submilliarcsecond-scale observations of macrolensed radio jets*, *MNRAS* **431** (2013) 2172–2183, [arXiv:1208.5482].

[11] 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* **11** (2012) 57, [arXiv:1207.0810].

[12] A. C. Vincent, P. Scott, and R. Trampedach, *Light bosons in the photosphere and the solar abundance problem*, *MNRAS* **432** (2013) 3332–3339, [arXiv:1206.4315].

[13] P. Scott, *Pippi – painless parsing, post-processing and plotting of posterior and likelihood samples*, *Eur. Phys. J. Plus* **127** (2012) 138, [arXiv:1206.2245].

[14] C.-E. Rydberg, E. Zackrisson, P. Lundqvist, and P. Scott, *Detection of isolated Population III stars with the James Webb Space Telescope*, *MNRAS* **429** (2013) 3658–3664, [arXiv:1206.0007].

[15] 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].

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[16] 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].

[17] 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].

[18] 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].

[19] 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].

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[22] 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].

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[24] 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].

[25] 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].

[26] 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].

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

[28] 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].

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

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

[31] 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)

[32] N. Grevesse, M. Asplund, J. Sauval, and P. Scott, *Why GN93 should not be used anymore*, in *40th Liège International Astrophysical Colloquium. Ageing Low Mass Stars: From Red Giants to*

White Dwarfs (J. Montalbán, A. Noels, and V. Van Grootel, eds.), *European Physical Journal Web of Conferences* **43** (2013) 1004.

[33] N. Grevesse, M. Asplund, A. J. Sauval, and P. Scott, *The New Solar Chemical Composition – from $Z = 0.02$ to $Z = 0.013$*, in *Progress in Solar/Stellar Physics with Helio- and Asteroseismology* (H. Shibahashi, M. Takata, and A. E. Lynas-Gray, eds.), *Astronomical Society of the Pacific Conference Series* **462** (2012) 41.

[34] 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].

[35] 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].

[36] 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].

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[38] 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.

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[41] 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].

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