References for AxionLimits webpage

Ciaran O'Hare

ARC Centre of Excellence for Dark Matter Particle Physics
The University of Sydney, Camperdown, NSW 2006, Australia
ciaran.ohare@sydney.edu.au

1 Axion-photon

Haloscopes

- ABRACADABRA [1, 2]
- ADMX [3, 4, 5, 6, 7]
- CAPP [8, 9, 10]
- HAYSTAC [11, 12]
- ORGAN [13]
- QUAX [14, 15]
- RADES [16]
- RBF [17]
- SHAFT [18]
- UF [19]
- UPLOAD-DOWNLOAD [20]
- ABRACADABRA (projection) [21]
- ADBC (projection) [22]
- ADMX (projection) [23]
- aLIGO (projection) [24]
- ALPHA (projection) [25]
- BRASS (projection) [26]
- DM-Radio (projection) [27]
- DANCE (projection) [28]
- LAMPOST (projection) [29]
- MADMAX (projection) [30]
- KLASH (projection) [31]
- ORGAN (projection) [13]
- TOORAD (projection) [32]

LSW/Helioscopes

- ALPS [33]
- CAST [34, 35]
- CROWS [36]
- OSQAR [37]
- PVLAS [38]
- ALPS-II (projection) [39]
- IAXO (projection) [40]

Astro

- Chandra (Hydra) [41]
- Chandra (M87) [42]
- Chandra (NG7 1275) [43]
- Diffuse SN ALPs [44]
- Distance ladder [45]
- Fermi-LAT (NGC 1275) [46]
- Fermi-LAT (Extragalactic SNe) [47]
- HESS (PKS 2155-304) [48]
- Horizontal branch [49]
- Mrk 421 (ARGO-YBJ+Fermi): [50]
- Neutron Stars (Foster et al.) [51]
- Neutron Stars (Darling) [52]
- Solar neutrinos [53]
- SN1987A (decay) [54]
- SN1987A (gamma) [55]
- Star clusters [56]
- Telescopes (MUSE) [57]
- Telescopes (VIMOS) [58]
- Fermi galactic SN (projection) [59]
- THESEUS (projection) [60]
- eROSITA (projection) [61]

Cosmology

- Cosmology (ionisation fraction, EBL, X-rays) [62]
- BBN+$N_{\rm eff}$ [63]

2 Axion-electron

- EDELWEISS [64]
- Magnon non-demolition [65]
- LUX [66]
- Panda-X [67]
- SuperCDMS [68]
- XENON1T [69, 70]
- XENON1T (Solar basin) [71]
- Red giants (ωCen) [72]
- Solar neutrinos [73]
- Magnons (projection) [74]
- Polaritons (projection) [75]
- DARWIN (projection) [76]
- LZ (projection) [77]
- Semiconductors (projection) [78]
- White dwarf hint [79]

3 Axion-nucleon

Note: CASPEr and nEDM limits account for stochastic correction reported in [80]

- CASPEr-ZULF-Comagnetometer [81]
- CASPEr-ZULF-Sidechain [82]
- nEDM (ultracold neutrons and mercury) [83]
- NASDUCK [84]
- K-3He comagnetometer [85]
- Old comagnetometers [86]
- Torsion balance [87]
- Hot Neutron Star (HESS J1731-347) [88]
- SN1987 Cooling [89]
- SNO (deuterium dissasociation) [90]
- Proton storage ring (projection) [91]
- DM comagnetometer (projection) [86]
- CASPEr-wind (projection) [82]

4 Axion-EDM

- CASPEr-electric [92]
- nEDM [93]
- SN1987A [94]
- CASPEr-electric (projection) [95]

5 Axion mass versus f_a

- Binary pulsars and Solar core constraint on $\bar{\theta}$ [96]. I include minor numerical corrections made by [97, 98].
- nEDM [93]
- SN1987A [99]
- Neutron stars (projection) [96].
- NS-NS and NS-BH Inspirals (projection) [96].

6 CP-violating couplings

Combined constraints [100]

Scalar-nucleon

- Red giants [101]
- MICROSCOPE [102].
- Eot-Wash [103, 104, 105]
- Irvine [106]. Corrected to 2σ limit by [107]
- HUST [108, 109, 110, 111].
- Stanford [112]
- IUPUI [113].
- Wuhan [107]

Pseudoscalar-electron

- Red giants [101]
- Eot-wash [114]
- NIST [115]
- SMILE [116].
- QUAX [117, 118]
- Washington [119, 120].
- XENON1T [121]
- Magnon (projection) [75]
- QUAX (projection) [117].

Pseudoscalar-nucleon

- Neutron star cooling [88]
- Washington [122]. Limit taken from [123].
- SMILE [116].
- Mainz [124]
- ARIADNE (projection) [125]
- CASPEr-wind (projection) [95]
- DM comagnetometer (projection) [86]

7 Black hole superradiance

- Baryakhtar et al. [126] (just Stellar mass BHs)
- Mehta et al. [126] (Stellar mass and SMBHs)
- Stott [127]
- Cardoso et al. [128] (dark photon)

8 Dark photons

DP-SM photon transitions

- Coulomb [129, 130, 131, 132, 133],
- Plimpton & Lawton's experiment [134, 133]
- Atomic spectroscopy [135]
- Atomic force microscopy (AFM) [133]
- Static magnetic fields of the Earth [136]
- Static magnetic fields of the Jupiter [137].
- ALPs [33]
- SPring-8 [138]
- UWA-LSW [139, 140]
- ADMX-LSW [141]
- CROWS [36].
- TEXONO [142]
- Crab nebula [143]
- COBE and FIRAS [144]

Production in stars

- CAST [145]
- SHIP [146]
- HB and RG stars [147]
- Neutron stars [148]
- Solar neutrinos [149]

Dark matter cosmology/astro

- Arias et al. [150]
- Witte et al. [151, 152]
- Caputo et al. [153, 144],
- IGM [154],
- Leo T dwarf [155]
- Gas clouds [156]

Dark matter experiments

- Reinterpreted axion limits [157]
- DAMIC [158]
- Dark E-field Radio [159]
- DM Pathfinder [160]
- FUNK [161]
- SENSEI [162]
- SHUKET [163]
- SuperCDMS [164]
- SQuAD [165],
- Tokyo dish antennae experiments [166, 167, 168]
- WISPDMX [169]
- XENON1T/XENON100 [78, 121, 170, 171].

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