References for AxionLimits webpage

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1 Axion-photon

Haloscopes

- ABRACADABRA [1, 2]
- ADMX [3, 4, 5]
- ADMX-Sidecar [6]
- ADMX-SLIC [7]
- CAPP [8, 9, 10]
- BASE [11]
- HAYSTAC [12, 13]
- ORGAN [14]
- QUAX [15, 16]
- RADES [17]
- RBF [18]
- SHAFT [19]
- UF [20]
- UPLOAD-DOWNLOAD [21]
- ABRACADABRA (projection) [22]
- ADBC (projection) [23]
- ADMX (projection) [24]
- aLIGO (projection) [25]
- ALPHA (projection) [26]
- BRASS (projection) [27]
- DM-Radio (projection) [28]
- DANCE (projection) [29]
- LAMPOST (projection) [30]
- MADMAX (projection) [31]
- KLASH (projection) [32]
- ORGAN (projection) [14]
- TOORAD (projection) [33]

LSW/Helioscopes

- ALPS [34]
- CAST [35, 36]
- CROWS [37]
- OSQAR [38]
- PVLAS [39]
- ALPS-II (projection) [40]
- IAXO (projection) [41]
- IAXO (Galactic SN) [42]

Astro

- Chandra (Hydra) [43]
- Chandra (M87) [44]
- Chandra (NG7 1275) [45]
- Diffuse SN ALPs [46]
- Distance ladder [47]
- Fermi-LAT (NGC 1275) [48]
- Fermi-LAT (Extragalactic SNe) [49]
- HESS (PKS 2155-304) [50]
- Horizontal branch [51]
- Mrk 421 (ARGO-YBJ+Fermi): [52]
- Neutron Stars (Foster et al.) [53]
- Neutron Stars (Darling) [54]
- Neutron Stars (Battye et al.) [55]
- Solar neutrinos [56]
- SN1987A (decay) [57]
- SN1987A (gamma) [58]
- Star clusters [59]
- Telescopes (MUSE) [60]
- Telescopes (VIMOS) [61]
- Fermi galactic SN (projection) [62]
- THESEUS (projection) [63]
- eROSITA (projection) [64]

Cosmology

- Ionisation fraction, EBL, X-rays [65]
- BBN+$N_{\rm eff}$ [66]

2 Axion-electron

- EDELWEISS [67]
- Magnon non-demolition [68]
- LUX [69]
- Panda-X [70]
- SuperCDMS [71]
- XENON1T [72, 73]
- XENON1T (Solar basin) [74]
- Red giants (ωCen) [75]
- Solar neutrinos [76]
- Magnons (projection) [77]
- Polaritons (projection) [78]
- DARWIN (projection) [79]
- LZ (projection) [80]
- Semiconductors (projection) [81]
- White dwarf hint [82]

3 Axion-nucleon

Note: CASPEr and nEDM limits account for stochastic correction reported in [83]

- CASPEr-ZULF-Comagnetometer [84]
- CASPEr-ZULF-Sidechain [85]
- nEDM (ultracold neutrons and mercury) [86]
- NASDUCK [87]
- K-3He comagnetometer [88]
- Old comagnetometers [89]
- Torsion balance [90]
- Hot Neutron Star (HESS J1731-347) [91]
- SN1987A Cooling [92]
- SNO (deuterium dissasociation) [93]
- Proton storage ring (projection) [94]
- DM comagnetometer (projection) [89]
- CASPEr-wind (projection) [85]

4 Axion-EDM

- CASPEr-electric [95]
- nEDM [86]
- SN1987A [96]
- CASPEr-electric (projection) [97]
- Storage Ring EDM (projection) [97]

5 Axion mass versus f_a

- Binary pulsars and Solar core constraint on $\bar{\theta}$ [98]. I include minor numerical corrections made by [99, 100].
- nEDM [86]
- SN1987A [101]
- Neutron stars (projection) [98].
- NS-NS and NS-BH Inspirals (projection) [98].

6 CP-violating couplings

Combined constraints [102]

Scalar-nucleon

- Red giants [103]
- MICROSCOPE [104].
- Eot-Wash [105, 106, 107]
- Irvine [108]. Corrected to 2σ limit by [109]
- HUST [110, 111, 112, 113].
- Stanford [114]
- IUPUI [115].
- Wuhan [109]

Pseudoscalar-electron

- Red giants [103]
- Eot-wash [116]
- NIST [117]
- SMILE [118].
- QUAX [119, 120]
- Washington [121, 122].
- XENON1T [123]
- Magnon (projection) [78]
- QUAX (projection) [119].

Pseudoscalar-nucleon

- Neutron star cooling [91]
- Washington [124]. Limit taken from [125].
- SMILE [118].
- Mainz [126]
- ARIADNE (projection) [127]
- CASPEr-wind (projection) [97]
- DM comagnetometer (projection) [89]

7 Black hole superradiance

- Baryakhtar et al. [128] (just Stellar mass BHs)
- Mehta et al. [128] (Stellar mass and SMBHs)
- Stott [129]
- Cardoso et al. [130] (dark photon)

8 Dark photons

Combined constraints [131]

SM photon-DP transitions

- Coulomb [132, 133, 134, 135, 136],
- Plimpton & Lawton's experiment [137, 136]
- Atomic spectroscopy [138]
- Atomic force microscopy (AFM) [136]
- Static magnetic fields of the Earth [139]
- Static magnetic fields of the Jupiter [140].
- ALPs [34]
- SPring-8 [141]
- UWA-LSW [142, 143]
- ADMX-LSW [144]
- CROWS [37].
- TEXONO [145]
- Crab nebula [146]
- COBE and FIRAS [147]

Production in stars

- CAST [148]
- SHIP [149]
- HB and RG stars [150]
- Neutron stars [151]
- Solar neutrinos [152]

Dark matter cosmology/astro

- Arias et al. [153]
- Witte et al. [154, 155]
- Caputo et al. [156, 147],
- IGM [157],
- Leo T dwarf [158]
- Gas clouds [159]

Dark matter experiments

- Reinterpreted axion limits [131]
- DAMIC [160]
- Dark E-field Radio [161]
- DM Pathfinder [162]
- FUNK [163]
- SENSEI [164]
- SHUKET [165]
- SuperCDMS [166]
- SQuAD [167],
- Tokyo dish antennae experiments [168, 169, 170]
- WISPDMX [171]
- XENON1T/XENON100 [81, 123, 172, 173].

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