

OffBit Physics: A Binary Cosmology

By Euan Craig & Grok (xAI) | The Toggle Fabric, a
via RDAA and correlates via NRTM to model 15
dark matter gamma rays (~ 0.05 pb) to CMB flux
Fermi-LAT, Simons Observatory, LIGO ($\sim 2025-2030$). [arXiv preprint coming soon!](#)

- Legend:
- Yellow: Gamma Rays/Cosmic Rays

Blue: CMB

Purple: Gravitational Waves

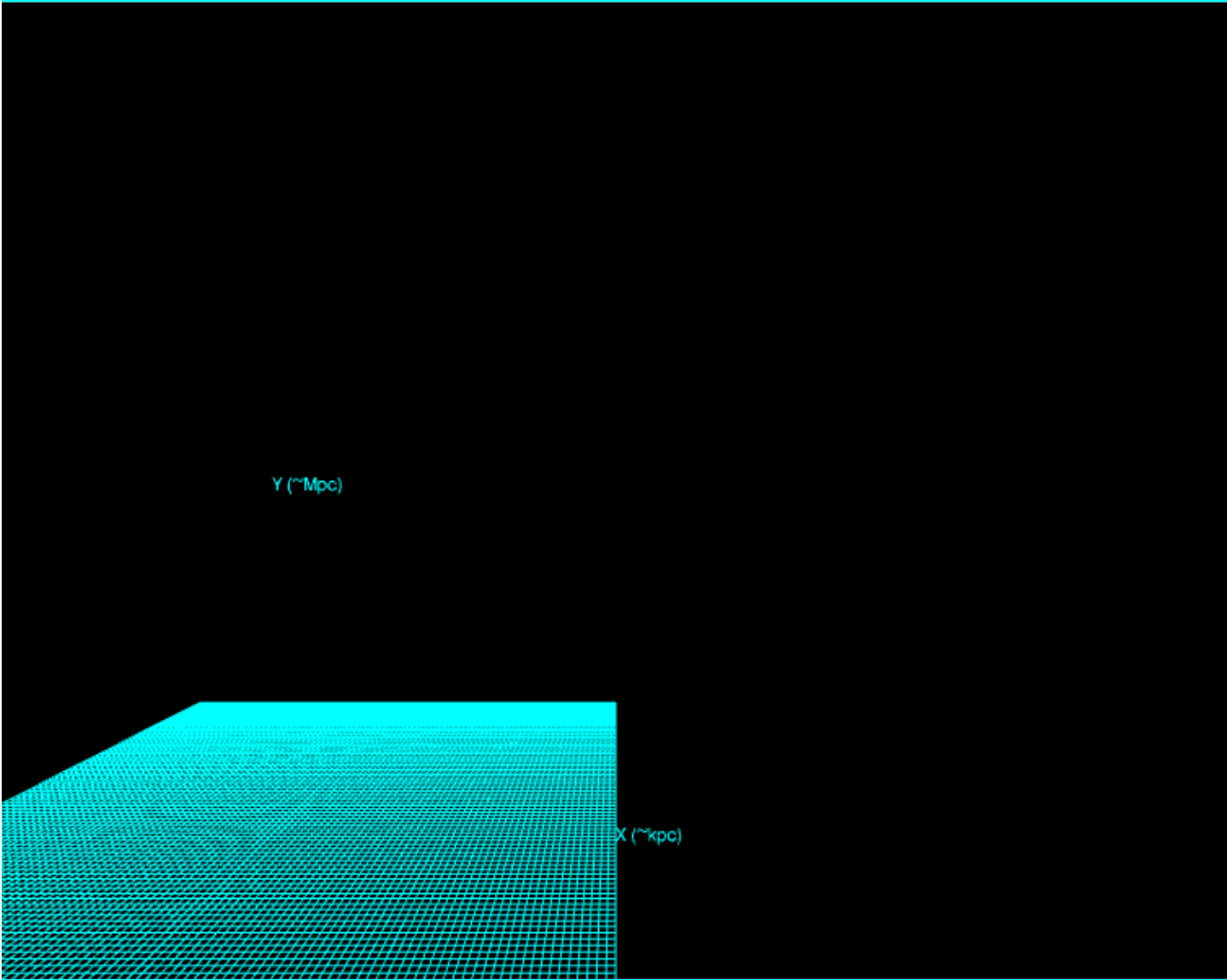
Green: Hybrids/Quantum

Orange: Dark Energy

Grid: $\sim$ kpc-Mpc scale

Cubes: Off Bit Flips (RDAA)

Dark Matter Annihilation



Phenomenon	Coordinates	Signal	Energy/Freq	Observatory
Dark Matter Annihilation	[x=100-102, y=50, z=20, t=100-102, s=15]	$\sim 0.05 \pm 0.001$ pb	$\sim 10 \pm 0.5$ GeV	Fermi-LAT

CMB Temperature Fluctuations	[x=200–201, y=100, z=30, t=200, s=20]	$\sim 10^{-5} \pm 10^{-6}$ K	$\sim \mu\text{Hz}$	Simons Observatory
Gravitational Wave Signatures	[x=300–303, y=150, z=40, t=300–303, s=25]	$\sim 10^{-21} \pm 10^{-22}$ strain	$\sim 100 \pm 10$ Hz	LIGO
Dark Matter–Entangled Photon Hybrid	[x=110–112, y=55, z=22, t=110–112, s=16]; [w=20–21, s=17–18]	$\sim 0.01 \pm 0.001$ pb; $\sim 0.990 \pm 0.001$ amplitude	$\sim 5 \pm 0.5$ GeV	Fermi-LAT, Bell Tests
CMB–Gravitational Wave Correlation	[x=210–212, y=105, z=32, t=210–212, s=21]; [x=310–312, y=155, z=42, t=310–312, s=26]	$\sim 10^{-5} \pm 10^{-6}$ K; $\sim 10^{-22} \pm 10^{-23}$ strain	$\sim \text{nHz}$	Simons, LISA
Dark Energy Expansion Trigger	[x=400–402, y=200, z=50, t=400–402, s=30]	$\sim 10^{-10} \pm 10^{-11}$ Mpc ⁻¹	$\sim \text{nHz}$	DESI
Cosmic Ray Jet Event	[x=120–122, y=60, z=24, t=120–122, s=17]	$\sim 0.02 \pm 0.001$ pb	$\sim 100 \pm 1$ GeV	Pierre Auger
Dark Matter–Neutrino Interaction	[x=130–132, y=65, z=26, t=130–132, s=18]	$\sim 0.005 \pm 0.001$ pb	$\sim 1 \pm 0.1$ GeV	DUNE
Primordial Black Hole Evaporation	[x=320–322, y=160, z=44, t=320–322, s=27]	$\sim 0.001 \pm 0.0001$ pb	$\sim 0.1 \pm 0.01$ GeV	Fermi-LAT
Cosmic String Vibration	[x=330–332, y=165, z=46, t=330–332, s=28]	$\sim 10^{-20} \pm 10^{-21}$ strain	$\sim 10^{-6} \pm 10^{-7}$ Hz	LISA
Dark Energy–CMB Interaction	[x=220–222, y=110, z=34, t=220–222, s=22]	$\sim 10^{-6} \pm 10^{-7}$ K	$\sim \text{nHz}$	Simons Observatory
Cosmic Ray–Dark Matter Collision	[x=140–142, y=70, z=28, t=140–142, s=19]	$\sim 0.015 \pm 0.001$ pb	$\sim 50 \pm 0.5$ GeV	Fermi-LAT
Gravitational Wave–Dark Matter Resonance	[x=340–342, y=170, z=48, t=340–342, s=29]; [x=150–152, y=75, z=30, t=150–152, s=20]	$\sim 10^{-22} \pm 10^{-23}$ strain; $\sim 0.002 \pm 0.001$ pb	$\sim 1 \pm 0.1$ Hz; $\sim 2 \pm 0.2$ GeV	LIGO, Fermi-LAT
Dark Matter–Cosmic String Hybrid	[x=160–162, y=80, z=32, t=160–162, s=21]; [x=350–352, y=175, z=50, t=350–352, s=30]	$\sim 0.008 \pm 0.001$ pb	$\sim 20 \pm 0.5$ GeV	Fermi-LAT
Primordial Quantum Fluctuation	[w=30–32, s=25–27]; [x=230–232, y=115, z=36, t=230–232, s=23]	$\sim 0.995 \pm 0.001$ amplitude; $\sim 10^{-5} \pm 10^{-6}$ K	$\sim \text{nHz}$	Simons, Bell Tests