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Parker Bound and Monopole Production from Primordial Magnetic Fields

Friday, 8 July 2022 20:10 (20 minutes)

Magnetic Monopoles are one of the inevitable predictions of GUT theories. They are produced during phase transition in the early universe, but also mechanisms like Scwinger effect in strong magnetic fields might be taken into account. I will show that from the detection of an intergalactic magnetic field of primordial origin we can infer additional bounds on the magnetic monopole number density at present time. I will also discuss the implications of this bound for monopole pair production in primordial magnetic fields.

In-person participation

Yes

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