Contribution ID: **76** Type: **not specified**

Parker Bound and Monopole Production from Primordial Magnetic Fields

Tuesday 26 July 2022 17:12 (18 minutes)

Magnetic monopoles are inevitable predictions of GUT theories. They are produced during phase transition in the early universe, but also mechanisms like Schwinger effect in strong magnetic fields could give relevant contributions to the monopole number density. I will show that from the detection of intergalactic magnetic fields of primordial origin we can infer additional bounds on the magnetic monopole flux at present time. I will also discuss the implications of these bounds for monopole pair production in primordial magnetic fields.

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Session Classification: Parallel Session C

Track Classification: Astroparticle physics