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# Experimental monopole bounds updated by models of acceleration in cosmic fields

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Magnetic Monopoles are accelerated by cosmic magnetic fields in relation to their mass and number, due to back-reaction. After recent experimental lower limits on the intergalactic magnetic fields (IGMFs), we have revisited a coherent acceleration scenario in which monopoles are accelerated in intergalactic and Galactic magnetic fields before reaching the Earth (Phys.Dark Univ. 46 (2024)). This, for various fields realizations, allow us to recast several experimental limits on monopoles, from IceCube, Pierre Auger Observatory, MACRO, and seed Parker bounds, among others, in terms of monopole mass, while normally seen in function of the speed. We see that experimental limits are sensitive to acceleration in the IGMF in some conditions, so the argument can be reversed and magnetic monopoles limits can also be used to constraints the IGMF. Our scenario can be easily adapted to any different model of cosmic magnetic fields

**Primary authors:** PERRI, Daniele (Warsaw University); DORO, Michele (Dipartimento di Fisica e Astronomia Università di Padova); KOBAYASHI, Takeshi (SISSA)

**Presenter:** DORO, Michele (Dipartimento di Fisica e Astronomia Università di Padova)

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