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Ultra high energy cosmic rays from the Galactic center

It is shown that Eddington-like accretion event in the Galactic center several million years ago and particle acceleration at accompanying shocks and jets could explain the the observed cosmic ray spectrum at energies above 1 PeV. Cosmic ray particles are confined in extended (several hundred kiloparsec in size) galactic halo. It is shown that the halo magnetic field could be as small as 2×10^{-7} G for the effective confinement.

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