

New Trends in High-Energy Physics



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Black Hole Torsion Effect and its Relation to Information

In a Schwarzschild, metric that includes torsion effects, the corresponding event horizon is calculated and from that, we calculate the entropy of such black hole as a function is spin density that event horizon depends upon. Next using the entropy expression in terms of the number of information bits we calculate the dependence of spin density on the formation number N . Furthermore, we calculate the Ricci scalar for the given metric and its dependence on information is derived for parallel and antiparallel torsion. Finally, expressions for spin density demonstrate that in a spherical and hyperbolic universe the spin density is quantized in units of \hbar , where in the case of a flat universe no spin density is possible.

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