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### Planck粒子、磁单极子和亚夸克超对称伴子的相互关联

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The correlation between a Planck particle,a magnetic monopole and a supersymmetry companion of a subquark

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摘要 用亚规范理论和焦-官亚夸克模型、Nambu模型,唯象地算出亚夸克的质量,发现亚夸克的超对称伴子质量与宇宙大爆炸后磁单极子的质量相等,经强作用修正后,所得结果与Planck粒子质量仅差一个量级,现时粒子的超对称伴子大质量标度将从 $m_T \approx 175$  GeV一举延伸到 $m_{pl} \approx 1.22 \times 10^{19}$  GeV广大空白区,深化了对宇宙早期物理规律的认识.

关键词: 亚规范 亚夸克 超对称 磁单极子 Planck粒子

Abstract: The mass of a subquark is calculated phenomenologically by the sub-gauge theory,Jiao-Gong subquark model and Nambu model, and it is found that the mass of the supersymmetry companion of a subquark is equal to that of a magnetic monopole after the big bang of the universe. And after the strong interaction correction of it, the difference between the results from the computation and the mass of Planck particle is only one order of magnitude. The big mass scales of the supersymmetry companions of present particles will fill the vast blank area from  $m_T \approx 175$  GeV to  $m_{pl} \approx 1.22 \times 10^{19}$  GeV. The human cognition of physical laws about the early universe has been deepened.

Key words: [sub-gauge theory](#) [subquarks](#) [supersymmetry](#) [magnetic monopoles](#) [Planck particles](#)

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