$$\sigma/\varepsilon > \text{constant}\left[\ln(\varepsilon/m)\right]^{-\bar{P}},$$

where

$$\bar{P} = \partial f/\partial\alpha\Big|_{\alpha=0}. \tag{19}$$

The function $f(\alpha)$, which is related to the exponent function a_n by Eq. (9), can be computed explicitly, given the gauge group and quark content of the underlying theory. For definiteness we adopt the theory of Refs. (5), (6), (7) based on the color group SU(3)' and containing these quark triplets. For this theory one finds

$$\bar{P} = 1.35. \tag{20}$$

To summarize we find (for neutrinos or antineutrinos) that σ/ε is bracketed at large energies within the limits

$$D\left(\ln\frac{\varepsilon}{m}\right)^{-\bar{P}} < \sigma/\varepsilon < \frac{1}{\delta}C\left(\ln\frac{\varepsilon}{m}\right)^{\delta}, \tag{21}$$

where δ is an arbitrarily small positive constant and where $\bar{P}$, which depends on the structure of the underlying theory, is a constant of order unity; for SU(3)' the value is given by Eq. (20). In deriving these bounds we have made the mild assumption that the moment function $F_2^{(n)}(q^2)$ can be continued a small, but finite distance to the left of n = 0, for all q^2. For the rest the results depend solely on Eq. (2), which represents the