

Bound on Inelastic Total Cross-Sections

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We prove that the total inelastic cross-section is bounded by

$$\sigma_{inelastic} < \frac{\pi}{4m_\pi^2} (\ln s)^2,$$

i.e. a bound 4 times smaller than the bound obtained by L. Lukaszuk and the author on the total cross-section in 1967. With some extra assumptions, which look reasonable to most people, we show that the bound on the total cross-section itself is divided by 2. For details see [1, 2].

References

- [1] André Martin, *The Froissart bound for inelastic cross sections*, arXiv:0904.3724v4 [hep-ph].
- [2] André Martin, *Froissart bound for inelastic cross sections*, Phys. Rev. D **80**, 065013 (2009).

