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8.100, 2515 Speedway Stop C1200, Austin, TX 78712-1202. *On summability of moments for the
Boltzmann equation without Grad's cutoff.*

We consider the spatially homogeneous Boltzmann equation without the Grad's cutoff assumption in the case of variable hard potentials, and study the behavior of its exponential moments of order $s \in (0, 2)$. We provide a new proof of the generation of exponential moments of order up to the rate of potentials (γ). To examine the behavior of exponential moments of order beyond γ , we introduce Mittag-Leffler moments - a generalization of the exponential moments. The propagation of Mittag-Leffler moments of order $s \in (\gamma, 1]$ is proved under the full non-cutoff assumption. The propagation of Mittag-Leffler moments of order $s \in (1, 2)$ is proved under a modified non-cutoff assumption.

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