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*A Revisit of the Velocity Averaging Lemma: On the Regularity of Stationary Boltzmann Equation in a bounded Convex Domain*

We adopt the idea of velocity averaging lemma to establish regularity for stationary linearized Boltzmann equations in a bounded convex domain. Considering the incoming data, with three iterations, we establish regularity in fractional Sobolev space in space variable up to order 1-. This take is based on a joint work with Ping-Han Chuang, Chun-Hsiung Hsia, and Jhe-Kuan Su.