

Abstract Submitted
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Relative magnitude of “good” and “bad” collisions¹ BO GAO, Univ of Toledo — We give a more complete presentation of the quantum Langevin (QL) model for neutral-neutral bimolecular interactions and reactions [Gao, Phys. Rev. Lett. **105**, 263203 (2010)], and use it to provide a general discussion of the relative magnitude of “good” (elastic) and “bad” (inelastic or reactive) collisions. We show that this relative magnitude is determined by the long-range potential, and has the general characteristics of being “bad” at low temperatures and “good” at high temperatures.

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