perature exhibit similar rebound behavior (Karl and Frohn 2000; Chiu and Lin 2005

modes (i.e. n 2) decay quickly, leaving the dominant n = 2 mode which typically persists for hundreds of microseconds (Rayleigh 1945). Often, rotation is observed in rebounding droplets. The downstream velocity and reflection angle, that is, the angle the reflected stream makes with the substrate, are dramatically reduced after the impact by as much as 35 and 60%, respectively. One

Regime 2 behavior occurs when the droplet spacing in

interference between the incoming and outgoing streams after they rebound; something that might be seen for the elastic rebound of hard spheres at steep angles. It is the

risen to 0.74 ± 0.01. When the angle of incidence is very large (h_1 80), regime 1

the entire curve depicted in Fig. 12 is shifted to the left. The solid curve plotted in Fig. 12 is the prediction based on 26% smaller velocity, corresponding to the experiment of Fig. 4a. The data obtained from the incoming and rebounding droplet streams plotted in Fig. 12 closely match the curves calculated using Eq. (4) and Eq. (5).

It is important to note that the R

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