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Splashing and bouncing on dry, spinning surfaces JAMES BIRD, MICHAEL BRENNER, HOWARD STONE, Harvard University — We investigate splashing and bouncing of drops on a hydrophilic rotating surface. Experiments were performed where we systematically varied the impact velocity and the rotation speed of the substrate for several different fluids. We identify distinct transitions where there is complete wetting, bouncing, or splashing. For the case where there is splashing, there is an asymmetry of the impact that leads to an azimuthal variation of the ejected rim. A model for the azimuthal splash threshold is compared both with the data and with existing splash criteria.

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