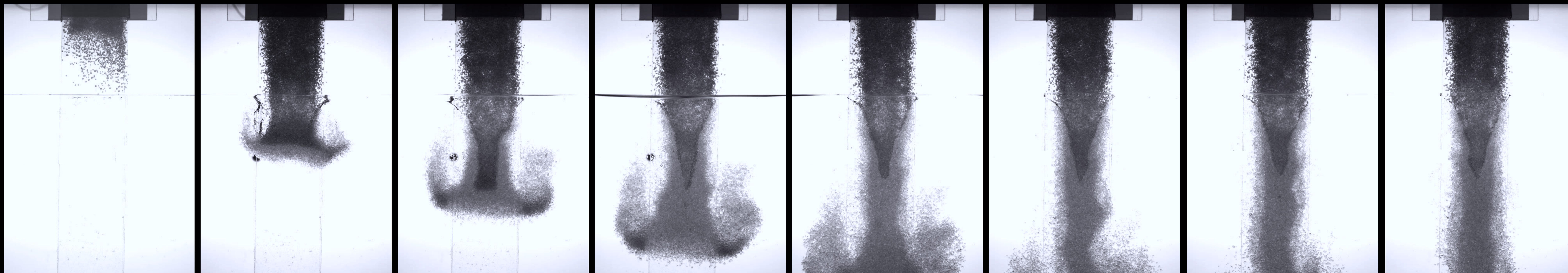
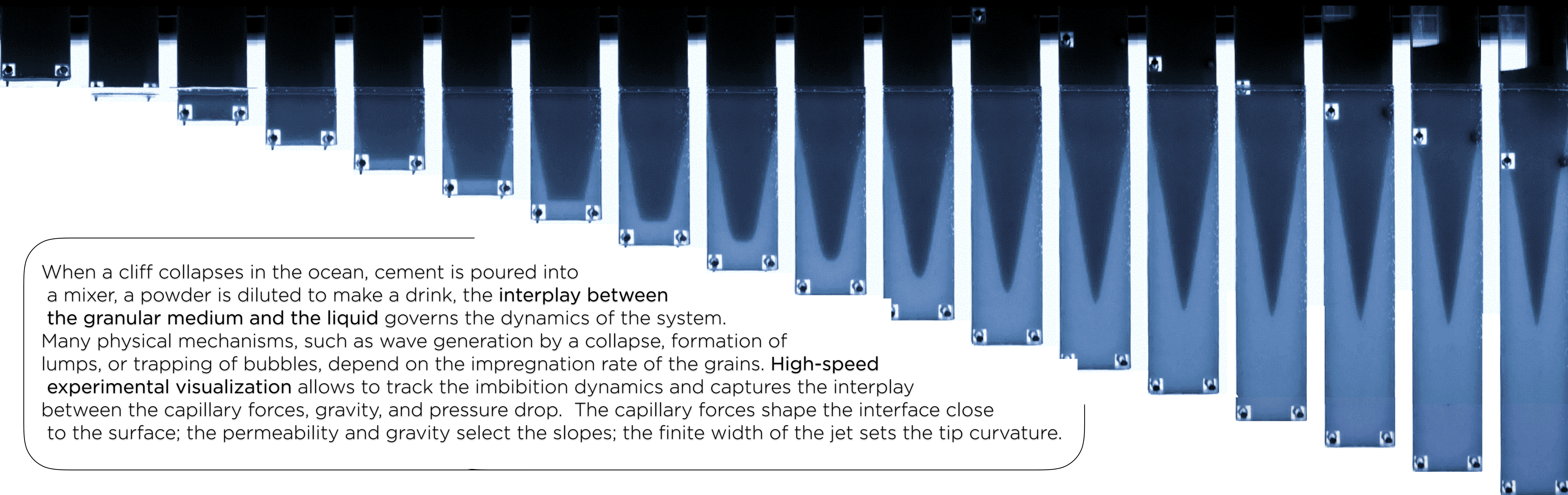


FALLING JET OF DRY GRANULAR MATERIAL IN WATER

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A dense jet of grains (top images) and a porous media (bottom images) exhibit the same behavior when entering water, with the formation of a V-shaped wet/dry interface. The dry region is dark whereas the light region is wetted by the liquid.



When a cliff collapses in the ocean, cement is poured into a mixer, a powder is diluted to make a drink, the **interplay between the granular medium and the liquid** governs the dynamics of the system. Many physical mechanisms, such as wave generation by a collapse, formation of lumps, or trapping of bubbles, depend on the impregnation rate of the grains. **High-speed experimental visualization** allows to track the imbibition dynamics and captures the interplay between the capillary forces, gravity, and pressure drop. The capillary forces shape the interface close to the surface; the permeability and gravity select the slopes; the finite width of the jet sets the tip curvature.