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Introduction to CFD of multiphase flow

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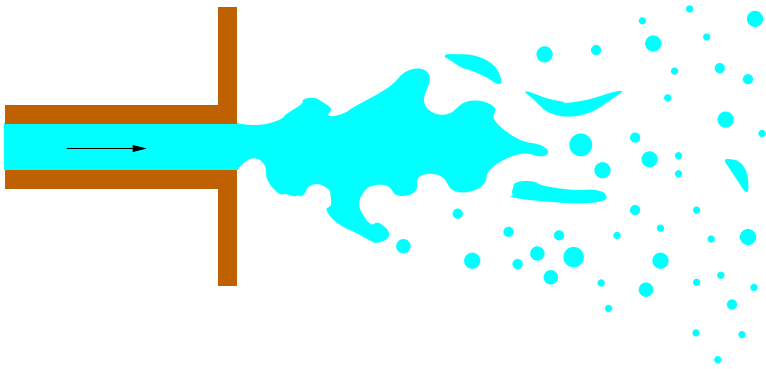
<http://www.lmm.jussieu.fr/~zaleski/zaleski.html>

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TYPICAL TWO PHASE FLOWS

- Atomization
- Droplet impact
- Cavitation bubbles
- Bursting bubbles

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<p>Definition :</p> <p>shattering or breakup of a fluid mass into smaller droplets</p> <p>Applications :</p> <ul style="list-style-type: none"> - liquid fuel combustion (furnaces, aircraft, rockets) <ul style="list-style-type: none"> <i>a</i> single jet <i>b</i> coaxial <i>c</i> air-assisted, conical, swirling - chemical engineering - spray formation atop ocean waves - cosmetics - agriculture - destruction of chemical warheads 		

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 <p>The diagram illustrates the process of simple jet atomization. On the left, a horizontal blue jet of liquid flows from left to right, indicated by a black arrow. This jet strikes a vertical brown barrier. Upon impact, the liquid is disrupted, forming a turbulent spray that breaks up into numerous smaller blue droplets of varying sizes, which are dispersed to the right.</p>		
<p>Simple jet atomization. Standard representation.</p>		