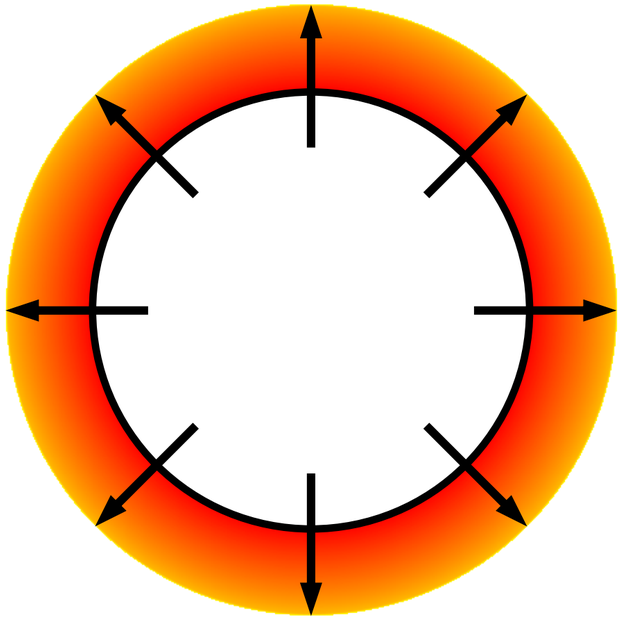
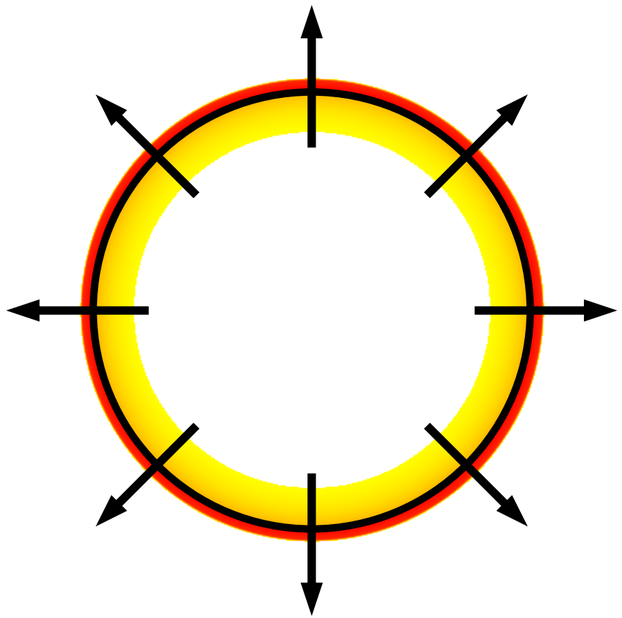


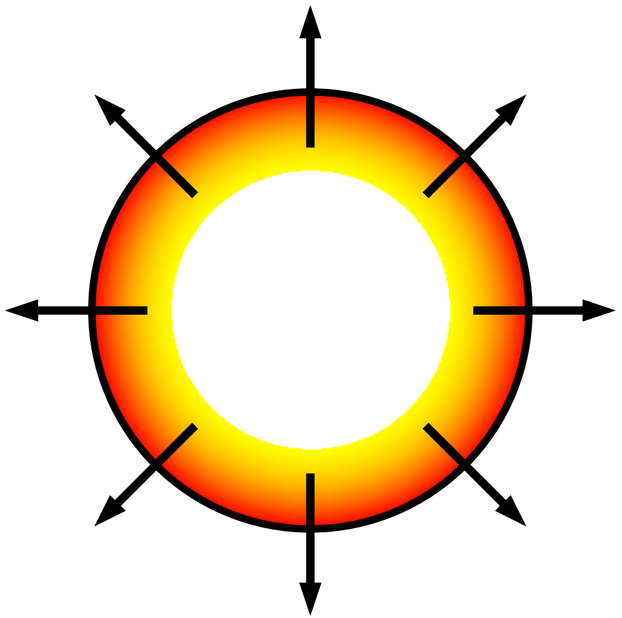
subsonic deflagration

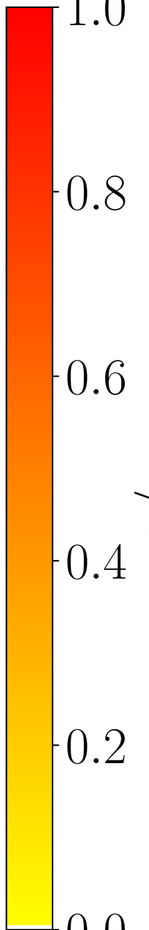
$v_{\mathrm{w}} \leq c_s$



supersonic deflagration

$c_s < v_{\mathrm{w}} < c_{\mathrm{J}}$



detonation

$c_s < c_{\mathrm{J}} \leq v_{\mathrm{w}}$