Fluid Mechanics

Fluids → liquids (water, ...)
Fluids → gases (air, ...)

toothpaste, latex paint

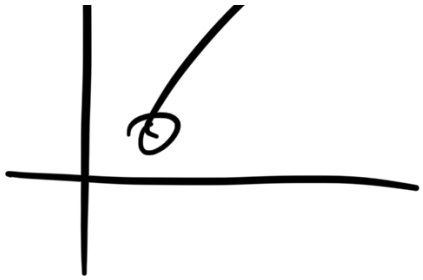
↑ Bingham plastic

↑ shear thinning Non-Newtonian fluid.

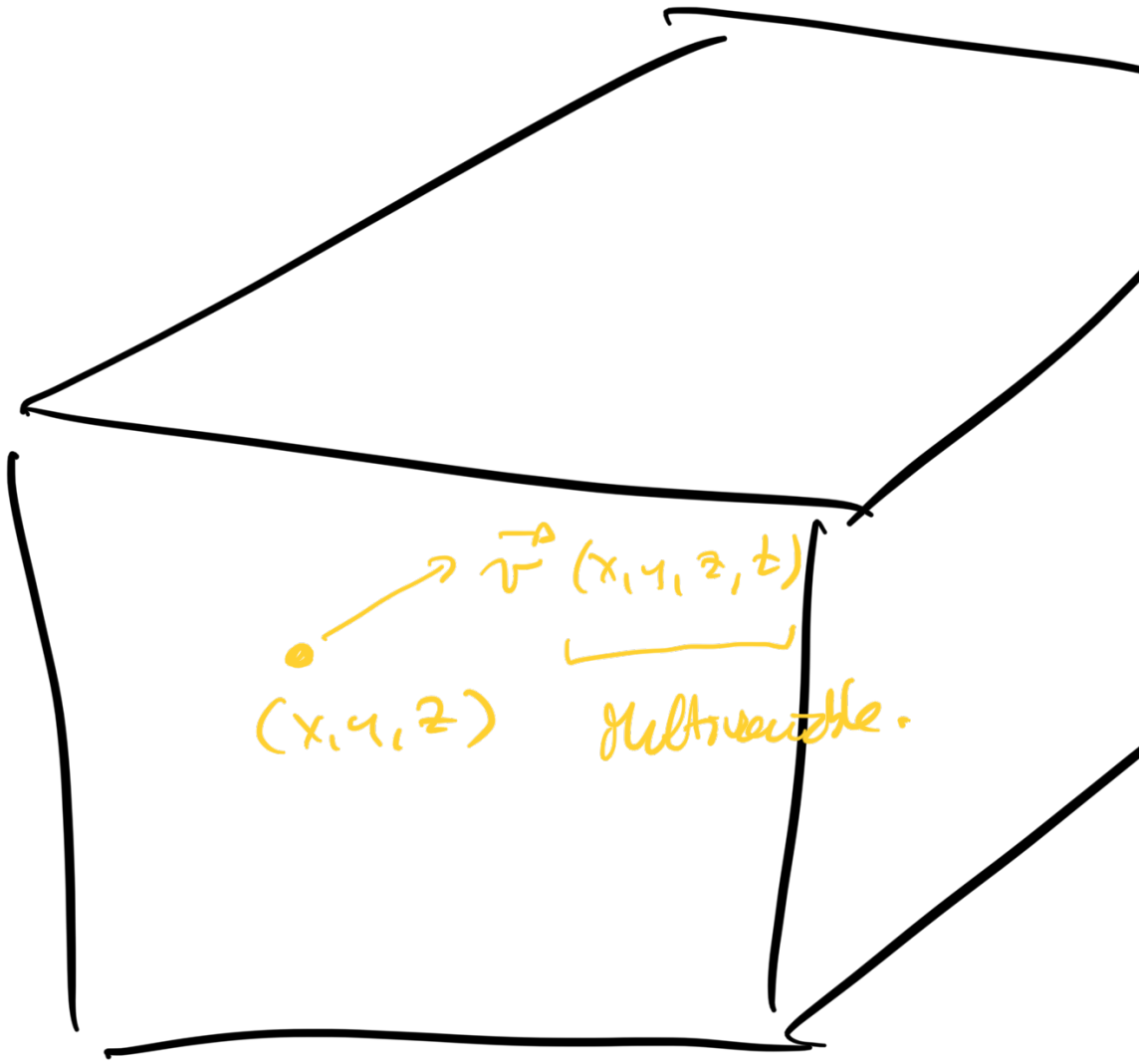
incompressible fluids → liquids

ρ = constant

Rmks : extended object.



$\vec{a}(t)$



$\vec{V}(x,y,z,t)$ → velocity field.

Vector Field

$T(x, y, z, t)$ → temp. field

Scalar Field

$p(x, y, z, t)$

$\vec{F} = m\vec{a}$ → $\vec{a}$ → $\vec{v}$ → ~~$\vec{x}$~~