# Continuity equation

# Momentum equation (horizontal)

# Momentum equation (vertical)

# Energy Equation

Boundary Conditions

Idea for vertical boundary conditions: use forward and backward difference approximation to get expressions for (top) and (bottom). So

# Horizontal (periodic)

# Vertical

## Vertical velocity

## Horizontal velocity

##### Top:

##### Bottom:

S

## Energy

##### Top:

##### Bottom:

Similarly

## Density

Top:

Bottom:

Initial Conditions

# Temperature

Ideal gas law:

# Pressure

WolframAlpha ❤

# Density & Energy

Misc

Questions

# Initial conditions?

* How to use the gradient and convective stability?
* Gange med dy/dy
* Finne T først, og så løse for P
* Density: ideel gass lov

# Boundary Conditions

* Energy Density
* Likning 32. Sett in for e, hint: likning 29.

Boundary Conditions: set and and just calculate and for the inner points???