



compressible  
reactive  
flow equations

*linearize*  
→

Linearized  
Reactive  
Flow eqns

↓  
*identify  
& filter  
sources*

base  
flow

↓  
*identify  
& filter  
sources*

Acoustic  
Perturbation  
Equations

*linearize*  
→

linearized  
APE

Lagrange-Euler

Lagrange-Euler

Lagrange-Euler