This course will examine the dynamics that govern atmospheric motions in the extra-tropics (although many of the concepts also apply to the ocean).

Topics include:

- Equations of motion in rotating, stratified fluids
- Shallow water theory: Gravity waves, Rossby waves
- Two-layer quasi-geostrophic theory
- Quasi-geostrophic theory in stratified fluids
- Baroclinic Instability
- Connecting theoretical dynamics to atmospheric general circulation

Organizational meeting: Tues 11\textsuperscript{th} Jan, 12-1, MP505

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