

## **ATOC 5060: Atmospheric dynamics**

### Homework exercise 1

Baseline road in Boulder is exactly 40 N. Perform a Taylor expansion of the Coriolis parameter  $f$ . Retain the first (linear) term to estimate the value of the Coriolis parameter at 45N based on a reference latitude of 40 N. Determine the size of the error in the approximation (as a percentage).