CodeLabs - Statistical DA

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Program

1. Kalman Filters
2. Ensemble KF
3. Extended KF

Linear Kalman Filter

- Kalman Filter for a scalar, Gaussian random walk

$\Rightarrow$ `02Examples/DA/kf_gaussRW.ipynb`

Ensemble Kalman Filter

- Ensemble Kalman Filter for Lorenz63 system

$\Rightarrow$ `02Examples/DA/enkf_l63.ipynb`

Extended Kalman Filter

- Kalman Filter and Extended Kalman Filter for a noisy pendulum with tracking of the position

  ⇒ `02Examples/DA/kf_ekf_pendulum.ipynb`

- Extended Kalman Filter for a noisy pendulum with tracking of both position and velocity

  ⇒ `02Examples/DA/ekf_2D_pendulum.ipynb`

References

1. Please consult the list provided on the website:
   CODE REFERENCES