Construction of partitioned reduced order model

Compute particular realisations (cost intensive) using domain decomposition (snapshots)

10th (last) timestep

\[ \theta = 15^\circ \]

\[ \theta = 45^\circ \]

Partitioned POD

Solution for arbitrary parameter using reduced model

\[ \theta = 30^\circ \]

\[ \approx \]

approximated by

Partitioned reduced basis

Locally non correlated: no reduction