

# MAIN.m

- (1) Defines the main wing design and simulation parameters: **wingDesignAndSimParameters.m**
- (2) Generates the wing structure model: **generateWingModelStructure.m**
- (3) Generates the wing aerodynamics model: **generateWingModelAero.m**

## ROM.m

### ObtainSnapshots.m

Computes flexible wing impulse response using **runFSI.m** and stores snapshots

*snapshots*

### ROMsim.m

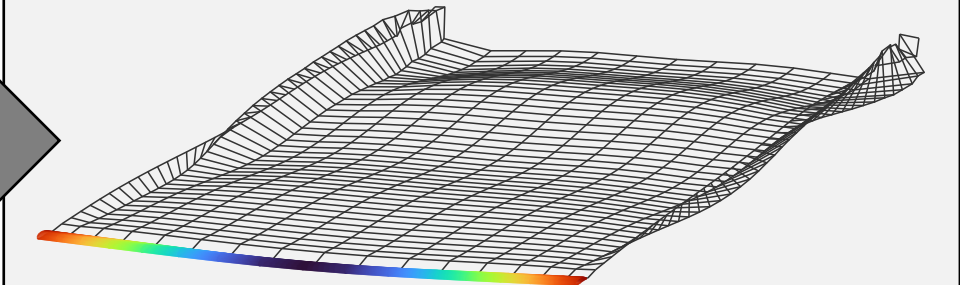
Computes different ROMs and runs reduced FSI using **runFSI\_ROM.m**

- (1) **Obtain\_aDMDc\_model.m**
- (2) **Obtain\_IODMD\_model.m**
- (3) **Obtain\_BMD\_model.m**

## runFSI.m

Solves the fluid structure interaction problem, coupling a finite element code with a 3D unsteady panel method

*output*



## runFSI\_ROM.m

Solves the fluid structure interaction problem using a reduced-order model

*output*

