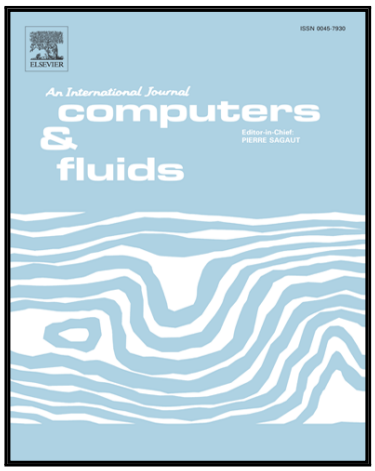

Model Reduction and Analysis of Deep Dynamic Stall on a Plunging Airfoil

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Highlights

- Dynamic Stall of MAV wing analyzed using Dynamic Mode Decomposition.
- Dominant flow structure oscillating at airfoil frequency with 4 harmonics found.
- Dominant POD modes are comprised of a combination of DMD modes.
- Local flow frequencies at leading edge represent global flow frequencies.