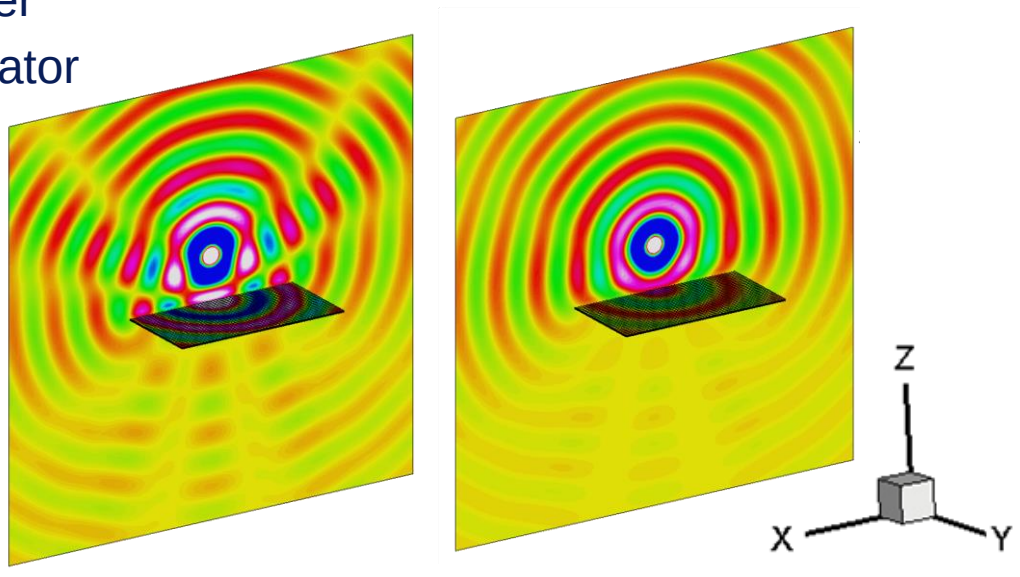
Michelle Pizzo

Old Dominion University // NASA Langley Research Center

- Embry-Riddle Aeronautical
  - BS Aerospace Engineering
  - MS Mechanical Engineering
- Old Dominion University
  - MS Applied Mathematics, Mod/Sim Certification
  - PhD Candidate Applied Mathematics, Computational Aeroacoustics
- NASA Langley Research Center
  - Civil Servant, HPC Incubator

Contour plots of the frequency-domain solutions for a rigid body [left] and soft body [right].



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PhD Work: Time-Domain Fast Acoustics Solver

Time-Domain Solvers

- Allow for simulation & study of broadband sources & time-domain transient signals
- Allow for scattering solutions at all frequencies to be obtained within a single computation
- Coupled with nonlinear computational fluid dynamics simulation of noise sources more naturally
- Time-domain boundary integral equations have an intrinsic numerical instability & carry a high computational cost

HPCI

High Performance Computing Incubator