

Pre- and Post-processing for CFD & Thermal Analysis of a CPU cooler

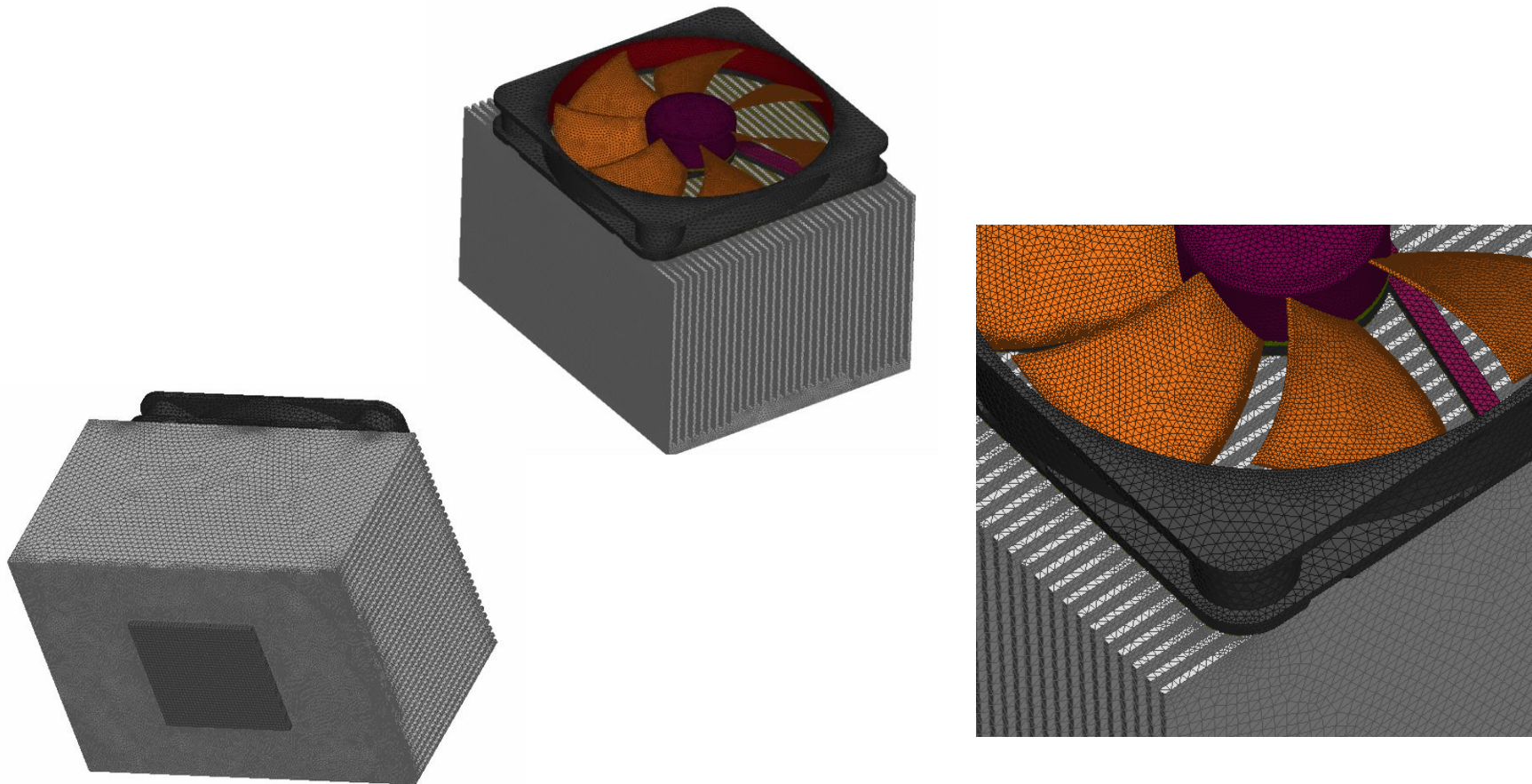
CPU Fan and Heatsink Shell Meshing

Automatic generation of curvature dependent high quality variable size mesh for CFD simulations.

Automatic check and fix of bad quality elements.

Different types of shell mesh (Quad, Tria, Mixed, Mapped).

Morphing for Optimization



CPU Fan and Heatsink Volume Meshing

Size Boxes for controlling local mesh refinement.

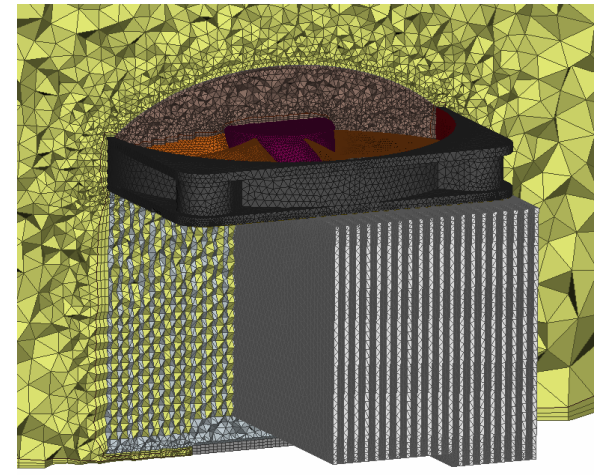
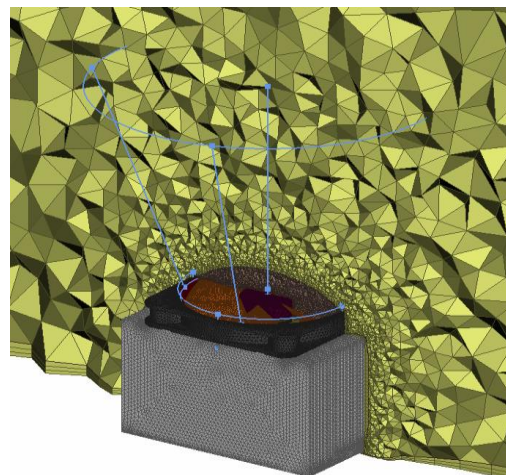
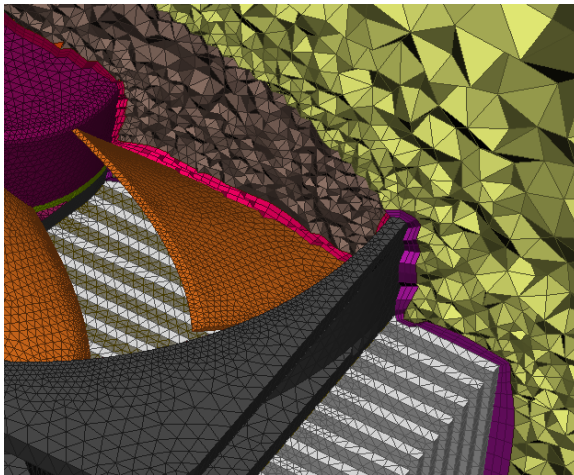
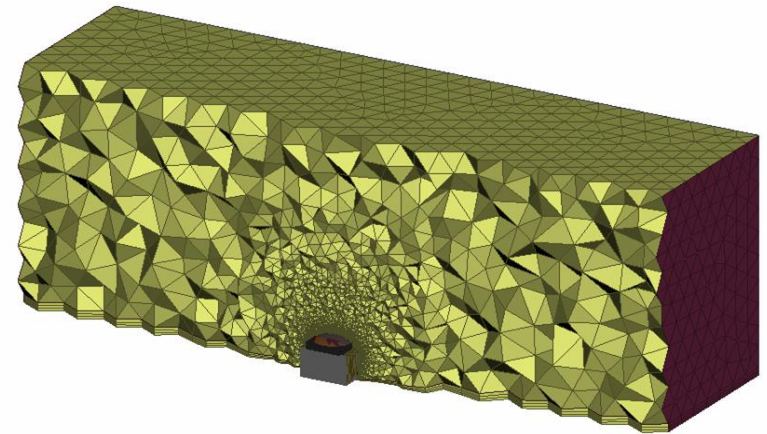
Highly controllable Layers generation for discretization of the boundary layer.

Easy creation of volume domains for MRF simulations.

Different types of volume mesh (Mixed, Mapped, Polyhedral, etc).

Automatic volume detection and solid meshing for Heat Transfer simulations.

Automatic quality improvement of solid elements according to defined criteria.

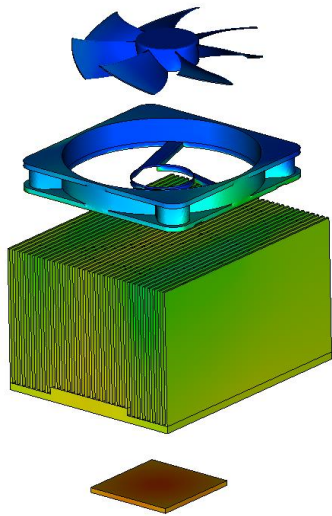


Post-processing for Heat Transfer analysis

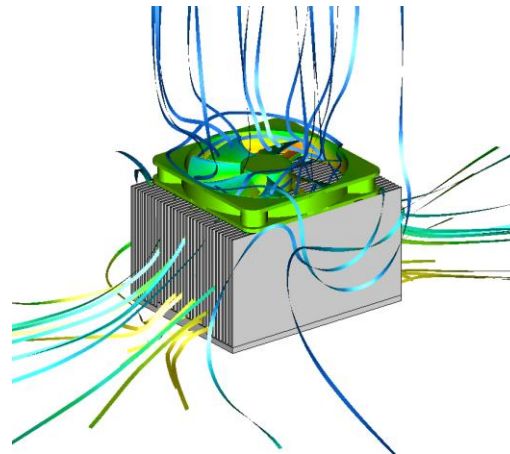
Contours Plots of Pressure, Velocity, Temperature, etc.

Combine at the same model Streamlines, Isofunctions, Cut Planes.

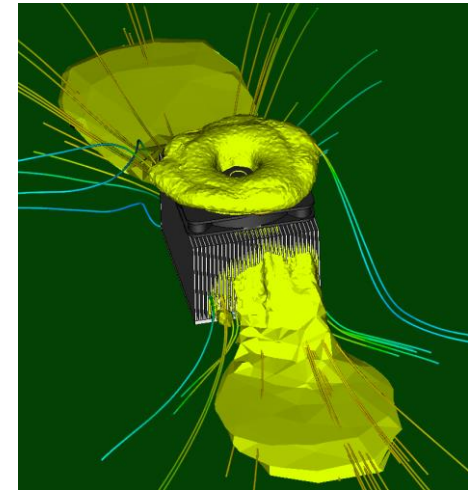
Visualize Vectors and Oil Flow.



Exploded view of fan, heatsink and CPU, colored according to temperature.

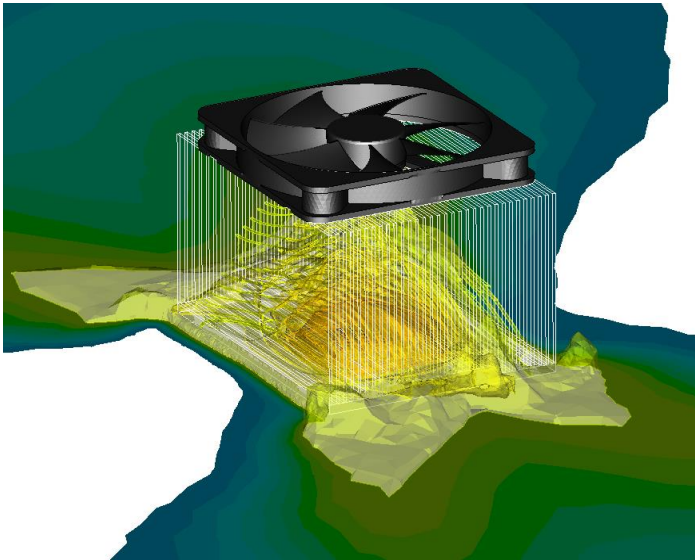


Pressure on the fan and streamlines according to temperature.

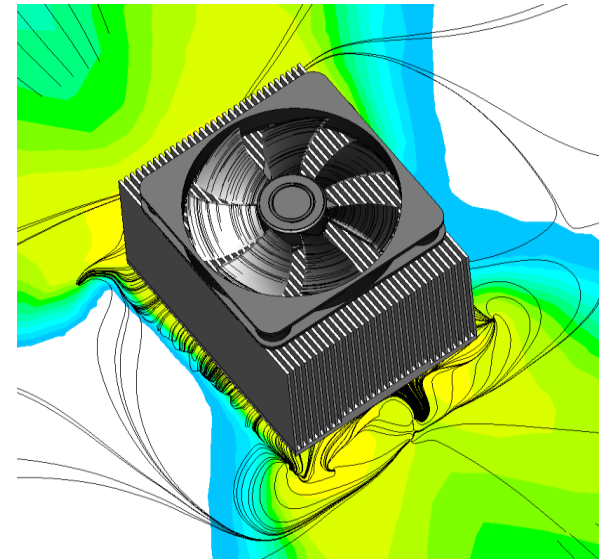


Isofunctions of velocity and streamlines colored to velocity.

Post-processing for Heat Transfer analysis



Isofunctions of temperature inside the heatsink.



Oil flow on the fan and on the board and temperatures on the board.