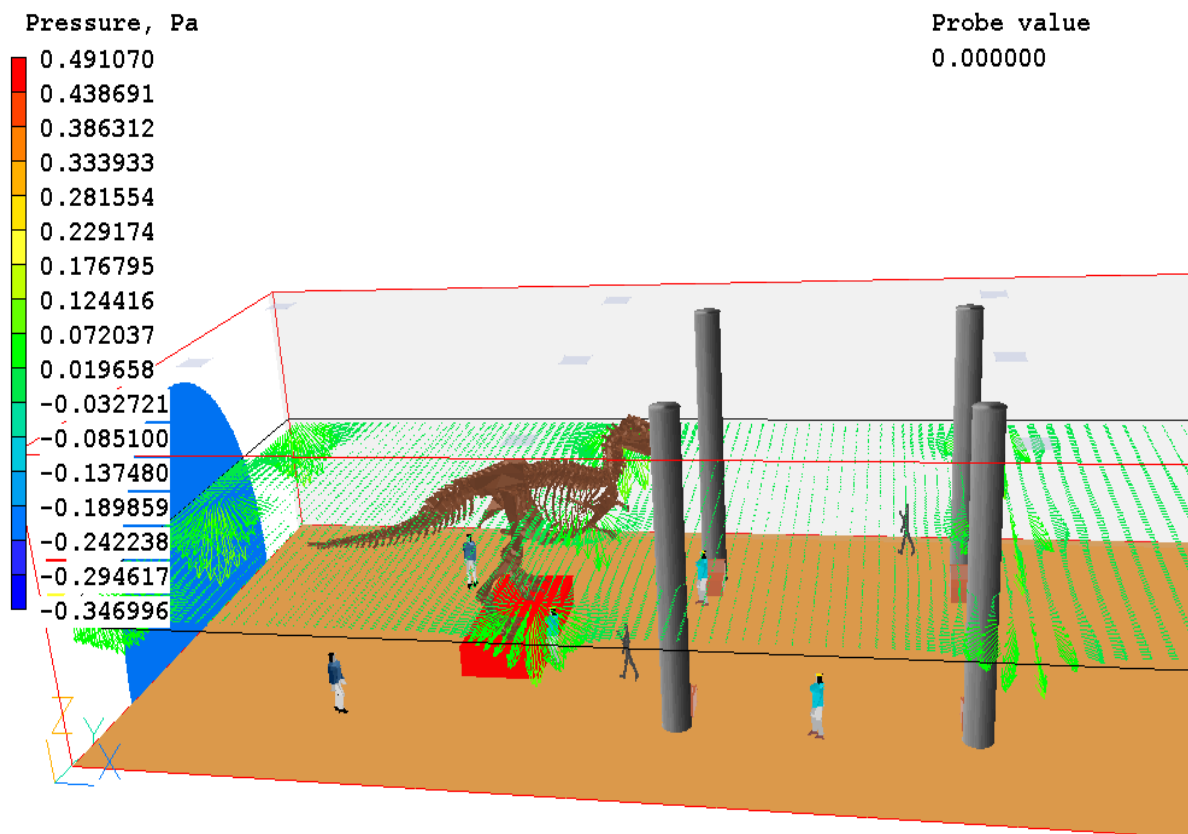


Example of PHOENICS use in complex geometry imported through STL file.

This example illustrates the capabilities of PHOENICS to treat in simple manner complex objects, in the occurrence here a Tyrannosaurus skeleton imported through an STL file.

This capability of PHOENICS, i.e. the PARSOL technique enables flow field, turbulence modeling and conjugate heat transfer. The PARSOL technique alleviates the burden for the user to do fastidious work meshing complex curvilinear geometries. Instead it works with objects through a Cartesian mesh; the algorithmic included in PARSOL enables the account of curvilinear objects transparent to the user. With the possibility of combining several objects like here after: skeleton, human body, columns, circular inlet etc..



At the Museum: Tyrannosorus exhibition

Fig. 1 Field vector generated through ventilation trap in the ceiling

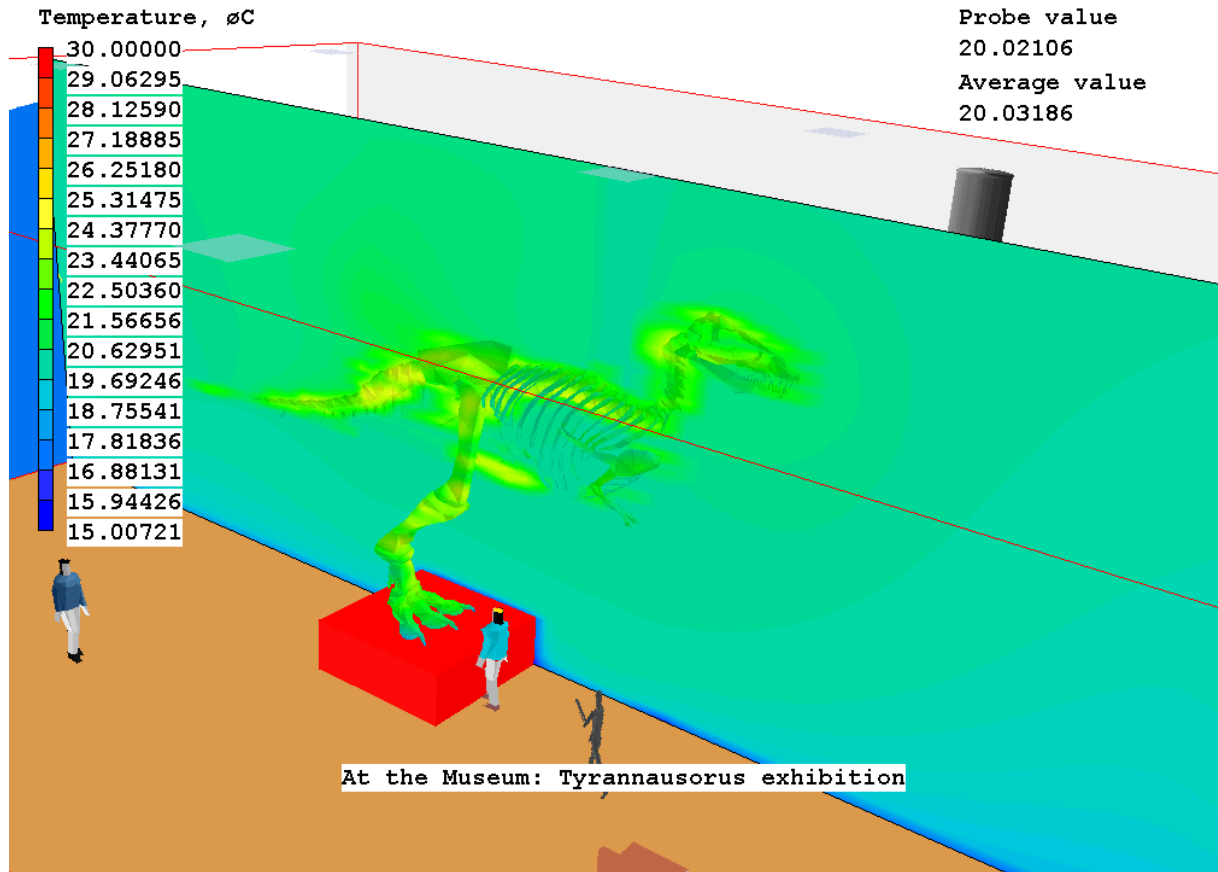


Fig. 2 Temperature field with Conjugate heat transfer. Diffusion of temperature on the skeleton.

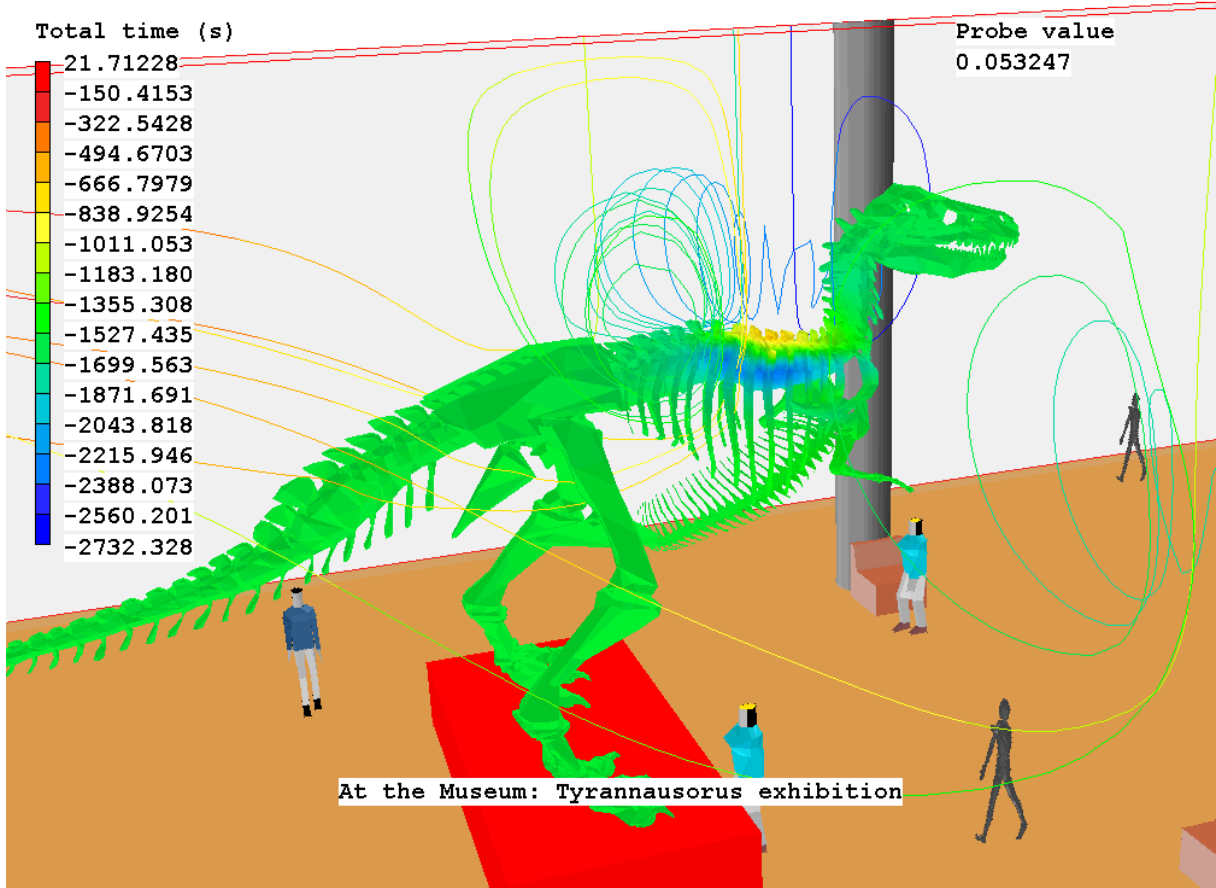


Fig. 3 Streak lines colored by dynamic pressure.