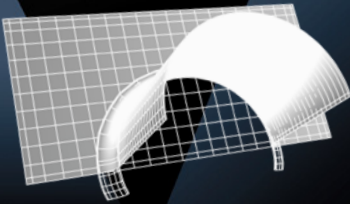


Use all capabilities of GiD also for isogeometric solvers. With its powerful geometrical kernel, GiD now allows for modelling, pre- and postprocessing and visualization of results on NURBS based geometries.

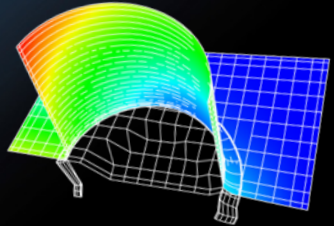
IGA SOLVER

Preprocessing



- › GiD's powerful CAD system working with trimmed NURBS surfaces.
- › Exchange NURBS geometries with various formats (IGES, STEP, ACIS ...).
- › Graphical assignment of materials, boundary conditions, loads, B-Rep properties, coupling information, etc. directly to the geometry.

Postprocessing



- › Coupling isogeometric analysis (IGA & IBRA) with GiD's powerful postprocessing.
 - › All the extensive visualization and postprocessing tools of GiD now available for NURBS geometries.
 - › Contour fill, vector plots, surface extrusions, model deformations, graphs and animations, etc.
-
- › Stereoscopic view, shadows, render reflection environment, mirror and floor effects, light and render controls.
 - › Completely adaptable to the simulation needs: multilingual, multiplatform and modern look interface, full customizable (menus, toolbars, appearance, logos...).
 - › Unique graphical interface for the user by integrating the solver with GiD.

Connecting your solver to GiD

From GiD to your solver:

- All necessary data for analysis like parametric and geometric information or material properties and conditions can be accessed using simple functions:

GiD_Info parametric: Coordinates, derivatives, UV of 3D lines and points, etc.

GiD_Geometry list / get: Identifiers information, geometric entities, boundaries, orientation, etc.

GiD_Info list_entities: List all applied information, properties, conditions, materials, etc.

- All information from the model accessible via powerful and intuitive scripting language TCL.
- All data can be written in the format that your solver needs.

From your solver to GiD:

- As easy as writing a text file, giving the scalar, vector or matrix result on control points of the NURBS, giving access to the complete graphical postprocessing system of GiD.
- GiD provides a post library for writing results in ASCII and binary format.

Industrial applications using IGA with GiD

- Structural isogeometric B-Rep analysis of a trimmed multi-patch shell geometry with Carat++.

