CEDREM

KTEX FAMILY
INTEGRATED NUMERIC TOOLS

KTEX PATTERN

- Industrial weave realistic geometry and mesh
- Customized weave with loom weave parameters
- Automatic model in Hypermesh including contact and material of yarn

KTEX LAYUP

- Identify shape of ply during lay-up process
Project material properties (Vf and yarn orientation)
on macro scale mesh
- Updated yarn orientation for simulation

KTEX WINDING

- Define real pattern of winding integrating yarn size
- Integrate size of yarn
- Generate macro scale material properties
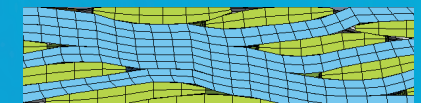
KTEX WOVEN PROPERTY

- Calculation of homogenized properties for any 2D and 3D weave
- Automatic generation of BULK and BLOCK cards
- Possibiliy to create customized weaves through interlacement map

KTEX FAMILY

- Integrated in Hyperworks™ tools
- Simulation of composite process integrating manufacturing constrains (weave, lay-up, winding)
- Automatic linear properties of composite in bulk and block format

Microscale analysis

Microscale mesh