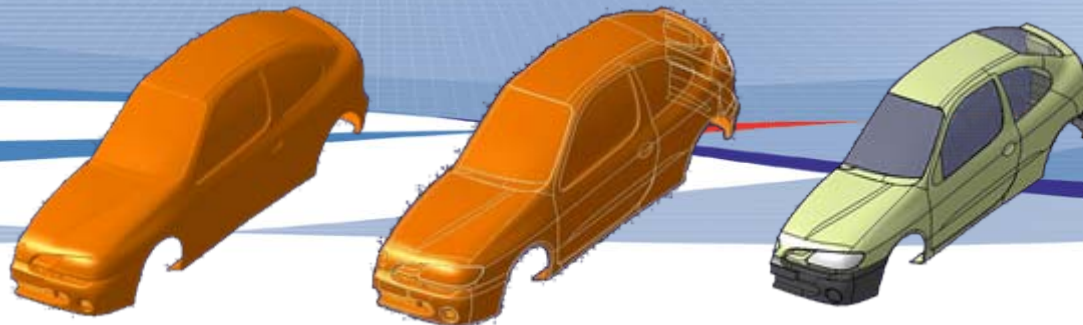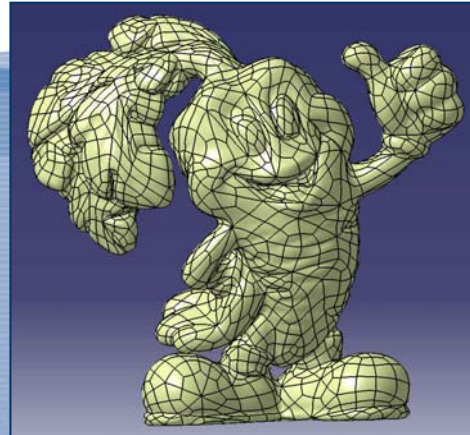# CATIA V5 Quick Surface Reconstruction
Automatic Surface Reconstruction
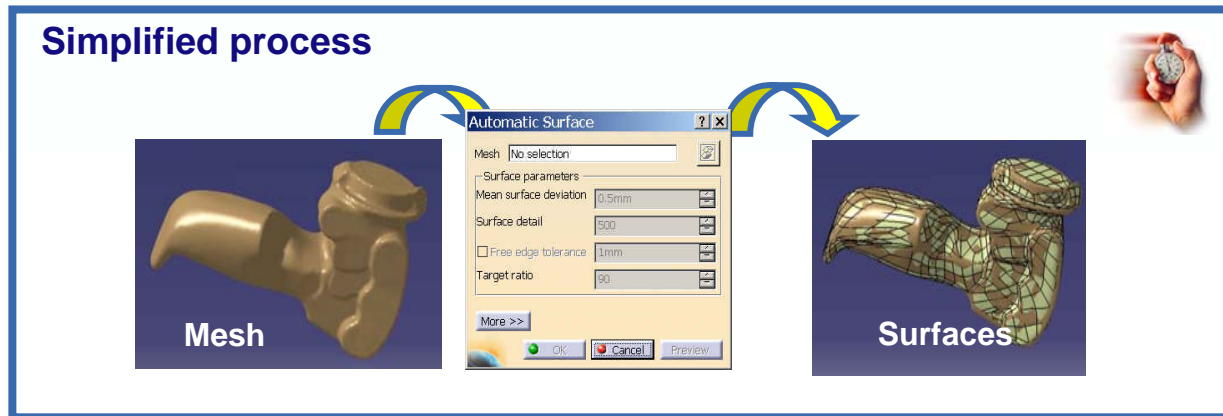
Rose-Marie Estebe
Dassault Systèmes Provence
ree@ds-fr.com

From Mesh to Surface : Automatic Reconstruction
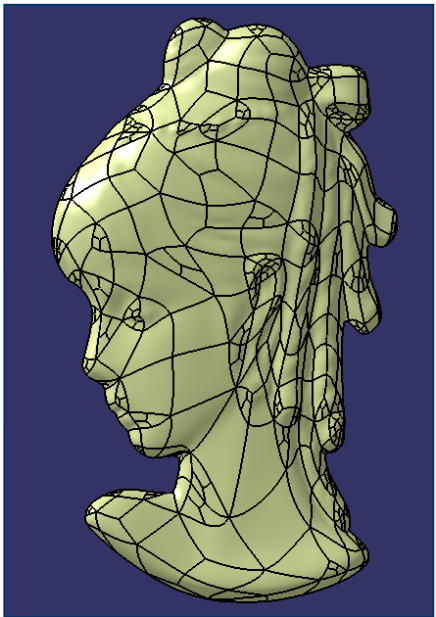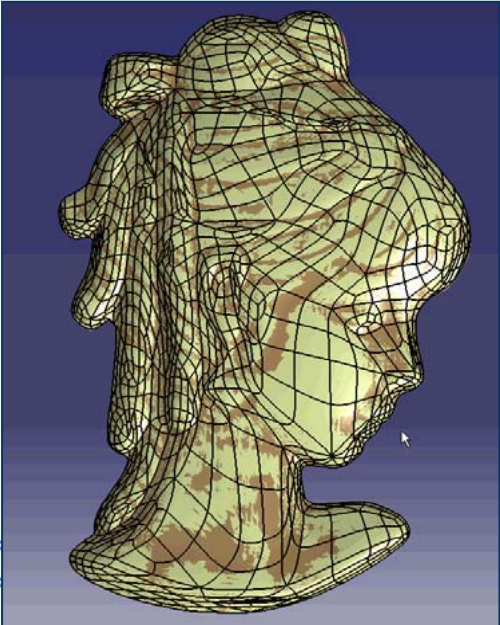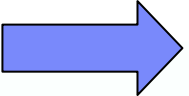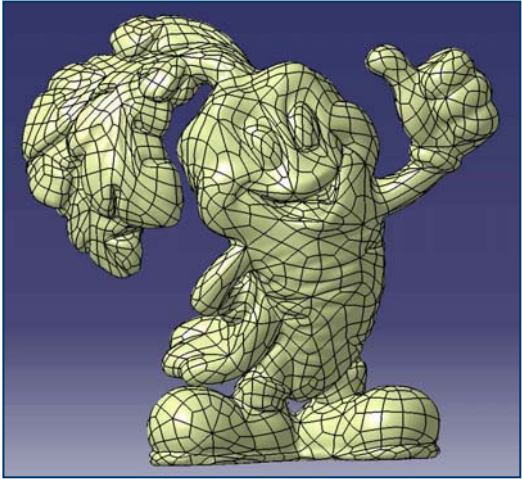
■ **CATIA V5 Quick Surface Reconstruction (QSR) :**

■ New command "Automatic Surface"

Simplified process

Mesh

Automatic Surface

Mesh   No selection

Surface parameters
Mean surface deviation   0,5mm
Surface detail   500
☐ Free edge tolerance   1mm
Target ratio   90

More >>

OK   Cancel   Preview
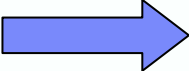
Surfaces

Value :
- *Productivity increase : "one click"*
- *New converter : "Digitized data (or STL data) to surface"*
  Collaboration : allows to exchange very quickly accurate Data, reverse-engineered from a physical model
- *Ease of use for a non surface specialist*
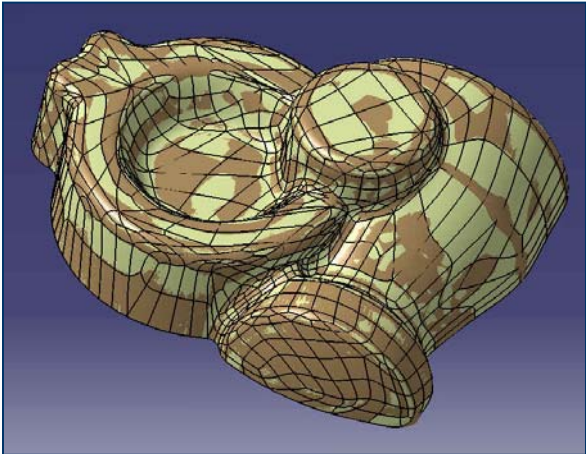- *Quality : perfect boundary continuity (tangency)*

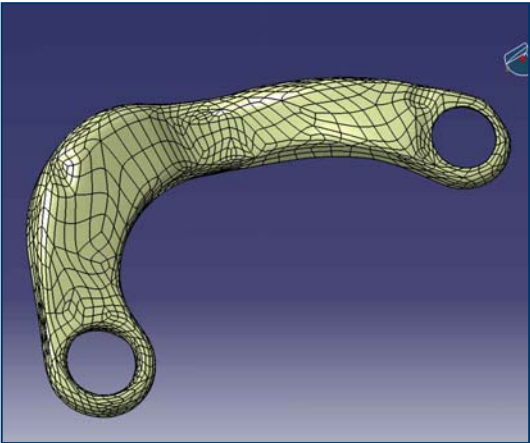# Automatic Surface : Result on complex shape in about 1 mn

3

Automatic Surface : Result on mechanical shape in about 1 mn

Master model

CAD Surfaces

FE
Analysis or simulation

Let us Have a Closer Look …

Demonstration : From Mesh to Surface

Thank You !