



SESSION 2 - ADVANCED RESEARCH AND DIGITAL TOOLS  
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MODELING AND MANUFACTURING STRATEGIES  
BASED ON SMARTGEOMETRY. EXAMPLE OF A STAND  
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ABSTRACT

The specific objectives of this article are:

1. Show the formal development of a stand based on parametric modelling and generative strategies in connection with the following digital manufacturing techniques named “sectioning”, “interlocking”, “contouring”, “tessellation” and “folding”.
2. Framing work in a social context, characterized at present by the facility for individual manufacturing. Thus the designer may be partly in the design and the manufacturing process.
3. Key to this development is the creative use of computational algorithmic design based on formal geometry and digital fabrication.

To achieve these objectives have been taken into account; the resources offered by the *Fab lab* (Fabrication Laboratories) and the software tools named Rhinoceros 3D and Grasshopper.