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## MODELING AND MANUFACTURING STRATEGIES BASED ON SMARTGEOMETRY. EXAMPLE OF A STAND H. Martinez, U. M. Bruscato, F. J. Seron

## **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 Grashopper.

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