



SESSION 3 - MODELLING TOOLS
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ARCHITECTURAL DESIGN USING WIRIS
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ABSTRACT

We suggest a proposal for the study of geometry and its application to Architecture which puts the accent on the relation and the use of geometric shapes in architectonic design as a multidisciplinary approach, using WIRIS.

In the design phase of an architectural project arise different possibilities for the shapes that compose it, which can be modeled mathematically.

The preliminary study of the mathematical properties of such modeling allows providing an answer to the problems that may arise in the choice of the forms, such as the amount of materials needed for construction, resistance to stress, etc.

WIRIS is a mathematical software platform, with a wide range of applications to different fields. Users access a web page, where calculations can be request and they receive immediate response.

The language used for WIRIS is very natural, similar to the one used in Mathematics and it is freely available on the web.