



ID de Contribution: 7

Type: **Non spécifié**

## Free boundary minimal surfaces with low topological types in the unit ball

*jeudi 9 janvier 2025 13:30 (1 heure)*

A free boundary minimal surface (FBMS) in the three-dimensional Euclidean unit ball is a critical point of the area functional with respect to variations that constrain its boundary to the boundary of the ball (i.e., the unit sphere). Nitsche proved in 1985 that the equatorial disc is the only FBMS in the ball which is topologically a disc. It is then natural to ask what are the examples of FBMS with higher topology.

In this talk, we will discuss recent existence results, which give a rather complete picture for low topological types (i.e. when the genus is less than one and the number of boundary components is less than two). Uniqueness results are still widely open.

**Orateur:** Prof. FRANZ, Giada