1125-06-1302   **Franck Jedrzejewski*** (`franckjed@gmail.com`), French Atomic Energy Commission (CEA), INSTN, 91191 Saclay, France. *Associahedra, combinatorial block designs and related structures.*

The purpose of this talk is to review some representations of low dimension structures such as associahedra (Stasheff polytope), permutohedra, and Tamari lattices and to study their adequacy to represent combinatorial objects. In particular, we look at some combinatorial block designs such that the number of blocks is a Catalan number. We investigate the relationship with the symmetric group, planar binary trees and the Loday's dendriform algebra. (Received September 16, 2016)