



Short Communications

IV Seminar on Categories and Applications

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Antonio Díaz, University of Aberdeen

A method for integral cohomology of posets

We present a method to compute integral cohomology of posets. This toolbox is applicable as soon as the sub-posets under each object possess certain structure. This is the case for simplicial complexes and simplex-like posets. The method is based on homological algebra arguments in the category of functors and on a spectral sequence built upon the poset. We show its relation to discrete Morse theory and we use it to give an alternative proof of Webb's conjecture for saturated fusion systems.

Contact address: a.diaz@maths.abdn.ac.uk
