

# HOCHSCHILD HOMOLOGY AND COHOMOLOGY OF SUPER JORDAN PLANE

**Sebastián Gustavo Reca**

Universidad de Buenos Aires, Argentina

sebareca@gmail.com

We compute the Hochschild homology and cohomology of the algebra  $A = \mathbb{k}\langle x, y | x^2, y^2x - xy^2 - xyx \rangle$ , known as super Jordan plane. This algebra has Gelfand-Kirillov dimension equal to 2, and it is also known as the Nichols algebra  $B(V(-1, 2))$ . We also describe the algebra structure of the Hochschild cohomology.

*Joint work with Andrea Solotar (Universidad de Buenos Aires, Argentina).*