

# INHERITANCE EXAMPLE OF ALGEBRAIC HYPERSTRUCTURE

---

Bianca-Liana Bercea (Straton)\*

*Ovidius University from Constanta*

## ABSTRACT

Algebraic hyperstructure represents a natural extension of classical algebraic structures. In a classical algebraic structure, the composition of two elements is an element, while in an algebraic hyperstructure, the composition of two elements is a set. Algebraic hyperstructure theory has a multiplicity of applications to other disciplines such as geometry, graphs and hypergraphs, binary relations, lattices, groups, fuzzy sets and rough sets, cryptography, codes, artificial intelligence and probability theory. Inheritance involves the passing of discrete units of inheritance, or genes, from parents to offspring. In this paper we will present examples of hyperstructures associated with inheritance.

**Keywords** Hyperstructre · Semihypergroup · Hypergroup · Hv-group · Inheritance

## References

- [1] B. Davvaz, A.D. Nehzad, M.M. Heidari. Inheritance examples of algebraic hyperstructures. *Information Sciences*, 224 (2013), 180-187.
- [2] B. O. Onasanya. A Note on hyperstructures and some applications. *International Journal of Mathematics*, 4 (2017), 60-67.
- [3] M. Al Tahan, B. Davvaz. Algebaric hyperstructures associated to biological inheritance. *Mathematical Biosciences* 285 (2017), 112-118.

---

\*bianca.bercea@365.univ-ovidius.ro