
A New Entropy for Hypergraphs

Isabelle Bloch^{*1} and Alain Bretto^{*2}

¹LTCI, Télécom ParisTech – LTCI, Télécom ParisTech, Université Paris-Saclay, 46 rue Barrault, 75013
Paris, France – France

²(Université de Caen) – (Université de Caen), Université de Caen – France

Abstract

This paper introduces a new definition of entropy for hypergraphs. It takes into account the fine structure of a hypergraph by considering its partial hypergraphs, leading to an entropy vector. This allows for more precision in the description of the underlying complexity of the hypergraph. Properties of the proposed definitions are analyzed.

*Speaker