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# Seminario Modelamiento Estocástico

# Expositor Pierre Paul Romagnoli Universidad Andres Bello

## Título Shearer's inequality and the Infimum Rule

### Abstract:

We review subbadditivity properties of Shannon entropy, in particular, from the Shearer'  $\in$  s inequality we derive the  $\in$  infimum ruleâ  $\in$  for actions of amenable groups. We briefly discuss applicability of the  $\in$  infimum formula to actions of other groups. Then we pass to topological entropy of a cover. We prove Shearer'  $\in$  s inequality for disjoint covers and give counterexamples otherwise. We also prove that, for actions of amenable groups, the supremum over all open covers of the  $\in$  infimum fomula gives correct value of topological entropy. Joint work with Tomasz Downarowicz and Bartosz Frej.

Martes 25 de Octubre a las 16:30 hrs, Sala de Seminarios Alan Turing, Séptimo Piso, Torre Norte de Beauchef 851



