

- ▶ NICOLÁS NÁJAR-SALINAS, *Independence in Finite Diagrams and Abstract Elementary Classes*.

Departamento de Matemáticas, Universidad Nacional de Colombia, Bogotá, Colombia
Departamento de Matemáticas, Universidad Externado de Colombia, Bogotá, Colombia.
E-mail: nicolas.na7ar@gmail.com.

This talk investigates the notion of independence in the context of Finite Diagrams and Abstract Elementary Classes in a local way, based on the concept of shattering. Using a generalization of Morley's Omitting Types Theorem (see [1] and [4]), we demonstrate how to transfer independence in finite diagrams and relate independence to order graph indiscernibles (see [3]) in this context. Furthermore, we provide some examples and, by employing Shelah's Presentation Theorem (see [1]), translate these results to the setting of Abstract Elementary Classes. The results discussed are joint work with Saharon Shelah and Andrés Villaveces and are part of the speaker's Ph.D. thesis.

[1] BALDWIN, JONH T.. *Categoricity*, University Lecture Series (Vol. 50), 2009

[2] NÁJAR-SALINAS, NICOLÁS; SHELAH, SAHARON AND VILLAVECES, ANDRÉS, *Around Non-elementary Dependence*, **Work in progress**.

[3] SCOW, LYNN, *Characterization of NIP theories by ordered graph-indiscernible*, *Annals of Pure and Applied Logic*, vol. 163 (2012), no. 11, pp. 1624–1641.

[4] SHELAH, SAHARON, *Classification theory: and the number of non-isomorphic models*, Studies in logic, Elsevier, 1990.