

# Introduction to forking in Abstract Elementary Classes

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The central notion of Shelah's book on Abstract Elementary Classes [Sh:h] is the notion of a good  $\lambda$ -frame. It is a forking like notion for types over models of size  $\lambda$  and the existence of it implies that the class is well-behaved in  $\lambda$ . In this series of talks we will focus on the question of the existence of extensions to models of size greater than  $\lambda$ . We will prove that under some reasonable hypothesis it is always possible to extend a frame. One interesting corollary of this is the existence of arbitrary large models, this is done within ZFC. The first couple of lectures will be based on [Sh:h] Chapter II, while our main theorem is the main theorem of [Bon14a].

## Referencias

- [Sh:h] Saharon Shelah, **Classification Theory for Abstract Elementary Classes**, vol. 1 & 2, Mathematical Logic and Foundations, no. 18 & 20, College Publications, 2009.
- [Bon14a] Will Boney, *Tameness and extending frames*, Journal of Mathematical Logic **14**, no. 2