

# A Gentle Introduction to the Stable Model Semantics for Logic Programs

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## Abstract

We present a short introduction to the stable model semantics in the context of logic programming. Our contribution uses enlightening animations to guide the spectator through the definition and basic properties of stable models. We then highlight the fundamental differences with classical semantics of propositional logic. We further explore the relation between the stable model semantics and the here-and-there semantics, a connection that allows to characterize strong equivalence in the former.

Target audience: We aim to provide an introduction to the stable models semantics, typically for undergraduate students or KR-enthusiasts who are unfamiliar with this non-monotonic semantics. We assume familiarity with the classical semantics of propositional logic and with the complexity class NP.

Our 15-minutes-long video is available on YouTube at the following link: [www.youtube.com/watch?v=5e4igPZEPu0](http://www.youtube.com/watch?v=5e4igPZEPu0).