

On the Dynamics of Beliefs

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Abstract

In the AGM paradigm, an agent's belief state is represented by a logically closed set of sentences (also called belief set) and primacy is given to the new information, in the sense that the new information is always fully incorporated into the agent's belief state. Not long after its publication, several variants of that model started to appear in the literature. From among those proposals we highlight (for being the ones that are directly related to this lecture):

- (i) The use of sets of sentences not (necessarily) closed under logical consequence – the so-called belief bases – rather than belief sets to represent the belief states of an agent;
- (ii) Classes of, so-called, non-prioritized operators, which are operators that do not satisfy the success postulate.

In this talk we present some of the models of belief change as well as the intuitions and motivations underlying them, and mention some of the recent and ongoing work of our group in this area.

Keywords: Belief Change, Non-prioritized Belief Change, Belief Bases, Profile Dynamics.