

# Temporal Equilibrium Logic<sup>\*</sup>

Pedro Cabalar

Department of Computer Science  
University of Corunna (Spain)  
cabalar@udc.es

**Abstract.** This talk introduces the Temporal Equilibrium Logic, a combination of standard Linear Temporal Logic with a formalism called Equilibrium Logic, used to characterise logic programming under the answer set semantics. The talk will explain the basic syntax and semantics together with some elementary properties and recent results. Some motivating examples will show the potential utility of nonmonotonic temporal reasoning for different application scenarios like action domains or context evolution.

**Short Biography.** Pedro Cabalar is an associate professor of the Department of Computer Science at the University of Corunna, Spain, and organizes the MSc and PhD degrees in Computing research offered by that department. He graduated in 1993 in Computer Science in the Politechnic University of Madrid and received his PhD degree from the University of Corunna in 2001, on the topic of causality in action domains. His research is mostly related to logical approaches for Knowledge Representation in Artificial Intelligence, being particularly interested in Nonmonotonic Reasoning and Logic Programming under the Answer Set semantics. He has both published and actively participated as Program Committee or reviewer in main conferences (ICLP, LPNMR, KR, AAI, ECAI, JELIA), journals (TLP, AIJ, AMAI) and specialized workshops (NMR, ASP, ASPOCP) of these areas. He has also conducted several research projects in Answer Set Programming, in coordination with other groups in Spain.

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