



Introduction to nonmonotonic reasoning

Winter Semester 2019/20

Exercise Sheet 7 – Autoepistemic logics

12th December 2019

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Exercise 7.1 Verify that the expansions obtained for the two AE-theories from Example 4.6 are correct.

Exercise 7.2 Given the AE-theory $T = \{\neg L p \rightarrow q, L q \rightarrow p, L q \rightarrow q\}$.

- (a) Compute the expansions of T .
- (b) Give an intuitive explanation of the expansions of T .

Exercise 7.3 Determine the expansions of:

- (a) $T_1 = \{L p \rightarrow q, L (q \vee r) \rightarrow s\}$
- (b) $T_2 = \{con \rightarrow L con, \neg L con\}$.