



Introduction to nonmonotonic reasoning

Winter Semester 2019/20

Exercise Sheet 6 – Autoepistemic logics

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Dr. (habil.) Anni-Yasmin Turhan

Exercise 6.1 Show that the normal form for AE-formulas is a normal form (i.e., every AE-formula can be equivalently transformed into normal form) and that this normal form preserves the degree of an AE-formula (i.e. $\text{degree}(\varphi) = \text{degree}(nf(\varphi))$).

Exercise 6.2 Show that the equivalences given in Lemma 4.9 do not hold for arbitrary sets E of AE-formulas.

Exercise 6.3 Prove or refute the following claim:
A stable set E is the unique expansion of its kernel E_0 .