

Faculty of Computer Science Institute of Theoretical Computer Science, Chair of Automata Theory

## **Description Logics**

Winter Semester 2016

**Exercise Sheet 8** 

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**Exercise 8.29** Show that the transformation of  $\mathcal{FL}_0$ -concepts into normal form requires only polynomial time.

**Exercise 8.30** Show that subsumption in  $\mathcal{FL}_0$  w.r.t. acyclic TBoxes is in co-NP by giving a polynomial-time reduction from this problem to the inclusion problem for acyclic finite automata (which is in co-NP).