Übungen zur Vorlesung **Modelltheorie** (WS 2012/13) 18.1.2013
Dozenten: PD Dr. Markus Junker, Prof. Dr. Martin Ziegler
Assistent: Dr. Juan Diego Caycedo
Tutor: Christoph Bier B.Sc.

Blatt 11

Aufgabe 1. Show that two $\mathcal{K}$-saturated structures are partially isomorphic.

Aufgabe 2. Let $\mathcal{K}$ be the class of finite graphs. Show that its Fraïssé limit is the countable random graph. (This yields another proof that the theory of the random graph has quantifier elimination.)

Aufgabe 3. Show that countable theories without a binary tree of consistent formulas are small.

Aufgabe 4. Let T be the theory of $(\mathbb{R}, <, Q)$ where Q is a predicate for the rational numbers. Does T have a prime model?

[0] http://home.mathematik.uni-freiburg.de/caycedo/lehre/ws12_modell/