MAXIMALITY AND RESURRECTION

KAETHE MINDEN

The maximality principle (MP) is the assertion that any sentence which can be forced in such a way that after any further forcing the sentence remains true, must already be true. In modal terms, MP states that forceably necessary sentences are true. The resurrection axiom (RA) asserts that the ground model is as existentially closed in its forcing extensions as possible. In particular, RA relative to H_c states that for every forcing \mathbb{Q} there is a further forcing \mathbb{R} such that $H_c^V \prec H_c^{V[G][H]}$, for $G * H \subseteq \mathbb{Q} * \dot{\mathbb{R}}$ generic.

It is reasonable to ask whether MP and RA can consistently both hold. I showed that indeed they can, and that RA + MP is equiconsistent with a strongly uplifting fully reflecting cardinal, which is a combination of the large cardinals used to force the principles separately. In this talk I give a sketch of the equiconsistency result, where the principles are restricted to various classes of forcing notions.