► SAKA*É* FUCHINO, *Strong Löwenheim-Skolem Theorem of stationary logics, game reflection principles and generically supercompact cardinals.*

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We consider Strong Löwenheim-Skolem Theorems of variations of stationary logic with the stationarity quantifier over weak second-order variables which run (in case of the standard setting) over countable subsets of the underlying set of a given structure. We single out three natural principles in term of these Löwenheim-Skolem Theorems which imply respectively that the size of the continuum is $\aleph_1$, $\aleph_2$ or very large (e.g. weakly hyper Mahlo).

Each of these three statements are consequences of three existential statements of generically supercompact cardinals and they are also related to reflection statements in terms of infinitary games and an extended notions of generically supercompactness.

Accepting the naturalness of the statements involved. Our results strongly suggest that the continuum should be either $\aleph_1$ or $\aleph_2$ or very large.

The resuls presented in this talk are obtained in a joint work with André Ottenbereit and Hiroshi Sakai.

[1] SAKAé FUCHINO, ANDRé OTTENBEREIT MASCHIO RODRIQUES AND HIROSHI SAKAI, *Strong downward Löwenheim-Skolem theorems for stationary logics, I,*, **submitted for publication**,

[2] SAKAé FUCHINO, ANDRé OTTENBEREIT MASCHIO RODRIQUES AND HIROSHI SAKAI, *Strong downward Löwenheim-Skolem theorems for stationary logics, II,*, **submitted for publication**,

[3] SAKAé FUCHINO, ANDRé OTTENBEREIT MASCHIO RODRIQUES AND HIROSHI SAKAI, *Strong downward Löwenheim-Skolem theorems for stationary logics, I,*, **in preparation.**