Schindler, Ralf; **Steel, John**

The self-iterability of $L[E]$. (English) Zbl 1178.03067

J. Symb. Log. 74, No. 3, 751-779 (2009).

Summary: Let $L[E]$ be an iterable tame extender model. We analyze to which extent $L[E]$ knows fragments of its own iteration strategy. Specifically, we prove that, inside $L[E]$, for every cardinal κ which is not a limit of Woodin cardinals there is some cutpoint $t < \kappa$ such that $J_\kappa[E]$ is iterable above t with respect to iteration trees of length less than κ.

As an application we show $L[E]$ to be a model of the following two-cardinals versions of the diamond principle. If $\lambda > \kappa > \omega_1$ are cardinals, then $\diamondsuit^*_{\kappa,\lambda}$ holds true, and if in addition λ is regular, then $\diamondsuit^+_{\kappa,\lambda}$ holds true.

MSC:

03E45 Inner models, including constructibility, ordinal definability, and core models

Cited in **20** Documents

Keywords:

iterable tame extender model; cutpoint; iteration trees; diamond

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