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

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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  $\kappa$  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  $\kappa$ .

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  $\diamond_{\kappa,\lambda}^*$  holds true, and if in addition  $\lambda$  is regular, then  $\diamond_{\kappa,\lambda}^+$  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

**Full Text:** [DOI](#)

**References:**

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