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Cardinal preserving elementary embeddings. (English) [\[Zbl 1245.03077\]](#)

Delon, Françoise (ed.) et al., Logic colloquium 2007. Proceedings of the European summer meeting of the Association for Symbolic Logic, Wrocław, Poland, July 14–19, 2007. Cambridge: Cambridge University Press; Urbana, IL: Association for Symbolic Logic (ASL) (ISBN 978-0-521-76065-2/hbk). Lecture Notes in Logic 35, 14-31 (2010).

Summary: Say that an elementary embedding $j : N \rightarrow M$ is cardinal preserving if $\text{CAR}^M = \text{CAR}^N = \text{CAR}$. We show that if PFA holds then there are no cardinal preserving elementary embeddings $j : M \rightarrow V$. We also show that no ultrapower embedding $j : V \rightarrow M$ induced by a set extender is cardinal preserving, and present some results on the large cardinal strength of the assumption that there is a cardinal preserving $j : V \rightarrow M$.

For the entire collection see [\[Zbl 1198.03005\]](#).

MSC:

03E45 Constructibility, ordinal definability, and related notions