▸ ŠÁRKA STEJSKALOVÁ, *The indestructibility of the tree property.*
Charles University, Department of Logic, Celetná 20, Praha 1, 116 42, Czech Republic,
web page: logika.ff.cuni.cz/sarka.
E-mail: sarka.stejskalova@ff.cuni.cz.

We show that the tree property at ω_2 in the Mitchell model $V[\mathbb{M}]$ is indestructible by all ccc forcing notions which live in an intermediate model $V[\mathrm{Add}(\omega, \kappa)] \subseteq V[\mathbb{M}]$, provided we start with a supercompact cardinal κ (κ becomes ω_2). This shows that it is consistent that a large class of ccc forcings cannot add new ω_2-Aronszajn trees (for instance, consistently, no ccc forcing living in L adds an ω_2-Aronszajn tree). With a fancier forcing, this result extends to all forcings which are (i) ω_1-closed and ω_2-cc and (ii) ω_2-directed closed. The result generalizes to cardinals larger than ω_2 and allows applications to Prikry-style forcing notions.

The work is joint with R. Honzik.