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Justin Tatch Moore* (justin@math.cornell.edu), Department of Mathematics, 555 Malott Hall, Cornell University, Ithaca, NY 14853-4201. *The Open Coloring Axiom in ccc forcing extensions.*

Ilijas Farah has shown that forcing with a Souslin tree preserves OCA. Recall that, when considered as a forcing notion, a Souslin tree has the property that it is ccc and does not introduce new reals. The purpose of this talk is to demonstrate the following theorem:

Theorem If $V[G]$ is a generic extension by a ccc forcing notion and both V and $V[G]$ satisfy OCA, then either V and $V[G]$ contain the same reals or else $\omega^\omega \cap V$ is bounded in $V[G]$ in the order of eventual domination.

While this result is itself somewhat unremarkable, its proof has some interesting features. In particular it seems that it may be a precursor to a proof that OCA implies the continuum is \aleph_2 (if such a proof exists). (Received July 26, 2007)