1092-46-194 **Paul D McKenney*** (`pmckenney@gmail.com`), 325 Foxfire Dr, Apt 202, Oxford, PA 45056.
Forcing axioms and corona algebras.

Certain independence phenomena in set-theoretic topology have recently been shown to extend to the setting of operator algebras. For instance, in analogy to Shelah's landmark proof of the consistency of the statement "All automorphisms of $\mathcal{P}(\omega)/\mathrm{fin}$ are induced by an almost-permutation of ω", Farah has shown that, consistently, every automorphism of the Calkin algebra over a separable Hilbert space must be inner. I will discuss how both of these results are subsumed by a wide-reaching conjecture of Coskey and Farah, concerning the rigidity of corona algebras under forcing axioms; and some of my recent results in proving specific instances of this conjecture. (Received August 09, 2013)