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Troy J Siemers* (siemerstj@vmi.edu), 408 Mallory Hall, VMI, Lexington, VA 24450. *On the equation $a\mathcal{H}(b) \cap b\mathcal{H}(a) = 0$. Preliminary report.*

Explicit construction of certain function spaces is contingent on the overlap of certain subspaces. For $S = b/a$, where a and b are functions from the unit ball of H^∞ , construction of the space $\mathcal{H}(S)$ from the subspaces $\mathcal{H}(b)$ and $S\mathcal{H}(a)$ depends on the intersection $a\mathcal{H}(b) \cap b\mathcal{H}(a)$ being zero. Properties of a and b for which this holds are discussed. (Received October 02, 2000)