1086-47-1554   **Mrinal Raghupathi*** (`raghupat@usna.edu`) and **Ryan Hamilton**. *The Toeplitz corona problem for algebras of multipliers on a Nevanlinna-Pick space.*

Suppose $\mathfrak{A}$ is an algebra of operators on a Hilbert space H and $A_1, \ldots, A_n \in \mathfrak{A}$. If the row operator $[A_1, \ldots, A_n] \in B(H^{(n)}, H)$ has a right inverse in $B(H, H^{(n)})$, the Toeplitz corona problem for $\mathfrak{A}$ asks if a right inverse can be found with entries in $\mathfrak{A}$. When H is a complete Nevanlinna-Pick space and $\mathfrak{A}$ is a weakly-closed algebra of multiplication operators on H, we show that under a stronger hypothesis, the corona problem for $\mathfrak{A}$ has a solution. When $\mathfrak{A}$ is the full multiplier algebra of H, the Toeplitz corona theorems of Arveson, Schubert and Ball-Trent-Vinnikov are obtained. A tangential interpolation result for these algebras is developed in order to solve the Toeplitz corona problem. (Received September 23, 2012)

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