Marshall A. Whittlesey* (mwhittle@csusm.edu), Department of Mathematics, California State University San Marcos, 333 S. Twin Oaks Valley Road, San Marcos, CA 92096. Graphs of analytic functions in hull boundaries. Preliminary report.
Let $B_{n}$ be the open unit ball in $\mathbf{C}^{n}$, $X$ a subset of $\partial B_{n} \times \mathbf{C}^{m}$, and ( $z_{0}, w_{0}$ ) a point in $B_{n} \times \mathbf{C}^{m}$. We seek an analytic $f: B_{n} \rightarrow \mathbf{C}^{m}$ whose graph passes through $\left(z_{0}, w_{0}\right)$ and has boundary in $X$. We find such a graph based on the ability to place $\left(z_{0}, w_{0}\right)$ in the boundary of the polynomial hull of many subsets of $X$. (Received February 15, 2011)

