1003-41-983 **Natacha C. Fontes-Merz*** (`fontesnc@westminster.edu`), Department of Mathematics, Westminster College, New Wilmington, PA 16172. *Norms of Interpolation Operators.*

My talk concerns calculating the norm of the operator

$$L_{n-1}(\cdot; \zeta) : H^\infty(D) \to C$$

where $L_{n-1}(\cdot; \zeta)$ represents the Lagrange interpolation polynomial of degree $n-1$, evaluated at some complex number ζ, and defined by interpolating functions in $H^\infty(D)$ at the zeros of $z^n - r^n$. We assume that $0 < r < 1$ and that $|\zeta| > 1$.

Although our goal is to calculate the norm of the operator for all values of $n \geq 2$ and all values of ζ satisfying $|\zeta| > 1$, we will find an explicit formula for the norm of the operator for only certain values of n and ζ. In particular, we have formulas for $n \geq 3$ and $|\zeta| > 1.35$, for $n = 2$ and $|\zeta| > 1$, and for $n = 3$ and $\zeta = Re^{i\frac{\pi}{3}}$, where $R > 1$. (Received October 01, 2004)