

1125-VN-2322 **E. M. Sanger***, 244 Mathematics Building, Buffalo, NY 14260, and **T. W. Cusick**. *Rotation Symmetric Bent Boolean Functions in $n = 2p$ Variables*. Preliminary report.

There is a well known conjecture that there are no homogeneous Rotation Symmetric bent Boolean functions of degree greater than 2. In this talk we will use Hadamard matrices to characterize the RotS bent functions of degree 2. We will then extend this idea to higher degrees in both the homogeneous and nonhomogeneous cases when $n=2p$, p a prime. (Received September 20, 2016)