

1067-Z1-2187 **Thawda Aung*** (taung@randolphcollege.edu), Randolph College, 2500 Rivermont Ave,
Lynchburg, VA 24503. *Cryptology with Mathematica*. Preliminary report.

In the Randolph College Summer Research Program 2010, I have worked on a project where I studied the mathematics behind cryptography. I also explored with the software Mathematica and implemented various cryptosystems and attacks against them. The implementations helped me to better understand the intricacies of secure communication. In this presentation, I will share my work from the summer research project and demonstrate how some cryptosystems work in practice using the programs I have written in Mathematica. (Received September 22, 2010)