

**MATH 295A/395A: CRYPTOGRAPHY
HOMEWORK #6**

PROBLEMS FOR ALL

Problem 1. Decrypt the message

CLV SSH = RDMVE PFZII EAVYS XFTHS FNMOB RRPDH VBSQH

with the following Enigma settings:

Walzenlage (Rotors): I V III

Ringstellung (Ring setting): 13 06 24

Steckerverbindungen (Plug connections): AU PB EF IQ RH ZL DT MS CG KN

[Hint: The message is in German!]

Problem 2. Read *Solving the Enigma* and *The Cryptographic Mathematics of Enigma* at:

<http://www.nsa.gov/publications/publi00016.cfm>

<http://www.nsa.gov/publications/publi00004.cfm>

- (a) How did luck contribute to the Allied cryptanalysts' efforts?
- (b) Compare the contributions of the Polish, American, and British cryptographers.

Please write roughly 1–2 pages for this question.