LIE GROUPS AND REPRESENTATIONS, FALL 2013
Problem Set 2

Due Monday, October 7

Problem 1: Kirillov problem 2.15.

This set of problems leads to the fact mentioned in class that

$$Sp(n) = Sp(2n, \mathbf{C}) \cap U(2n)$$

(note that Kirillov uses $Sp(n, \mathbf{C})$ to denote what I was calling $Sp(2n, \mathbf{C})$).

Problem 2: Kirillov problem 3.16

Problem 3: Kirillov Problem 3.1

Problem 4: Kirillov Problem 3.5

Problem 5: Kirillov Problem 3.8