

## Homework 6 (15 points)

1. In the  $I_3$  and  $Y$  plane present the groups of  $J^P = 0^-$  and  $J^P = 1^-$  mesons.

2. In the  $I_3$  and  $Y$  plane present the groups of  $J^P = \frac{1}{2}^-$ ,  $J^P = \frac{1}{2}^+$   
and  $J^P = \frac{3}{2}^+$  groups of baryons.

3. Calculate the generators of SU (2) group acting on spin eigenstates.