

Journal of Prashanth Thogaru for fall 2007

Prashanth Thogaru

11/13/2007

1 Week 1(Sep4-Sep11)

This time there are four people in our subgroup, Srikanth, Jyothsna, Chelsie and I. I sent my fall quarter class schedule to Dr. Martin.

2 Week 2(Sep11-Sep18)

This week I went through the handouts given by Dr. Martin, "Approximating a Wave function as an unconstrained sum of Slater determinant" and "A center of mass principle for the multiparticle Schrodinger equation". Dr. Martin has assigned a project to our research group "How to find the interaction between groups of electrons in quantum mechanics for the general case".

3 Week 3(Sep18-Sep25)

I have not done much in this week. I just reviewed the concepts explained by Dr. Martin in our subgroup meeting conducted on Tuesday. I was absent for the meeting held on Monday as I was sick on that day.

4 Week 4(Sep25 - Oct 02)

In our subgroup meeting Dr. Martin explained the Rank-one version for four groups in a row and four groups in Y and also explained how to use the existing determinant to compute the determinant we required. I have gone through the Rank-one version of four groups in a row and four groups in a Y and came to an idea about computing the determinant for the Rank-one version.

5 Week 5(Oct02-Oct09)

In our subgroup meeting Dr. Martin explained the computation of the Rank-one version determinant by splitting the original matrix into 4 determinants and I just went through the steps he followed in splitting the determinant.

6 Week 6(Oct09-Oct16)

In this week we entered into the original project which is to find the determinant for the general case for four groups in a Y. Dr. Martin explained the new approach to find the determinant and has given us a task to reproduce it. I tried to do that but I was not succeeded in doing that.

7 Week 7(Oct16-Oct23)

As we are unable move forward with the last week's approach Dr. Martin suggested us to follow a new approach and explained about the new approach and I have gone through the new approach. Dr. Martin has given a small task for our subgroup and I was done with that.

8 Week 8(Oct23-Oct30)

We discussed some more new things about the new approach in our subgroup meeting. Dr. Martin has assigned work for each of our subgroup members except me.

9 Week 9(Oct30-Nov6)

We discussed about next week's presentation in our subgroup meeting. Dr. Martin has divided the presentation into seven parts and has given a task for everyone in the group. I have chosen one of those seven parts.

10 Week 10(Nov6-Nov13)

This is the presentation week, We had three different group meetings in this week. On Monday in our regular meeting Ryan has given his presentation on "regression", I was absent to that Wednesday's meeting and we presented "Determinants" project on Friday. In First part of our presentation Srikanth explained Size Extensivity, Size Consistency, Multipole expansion and some introduction on summaries. In second part Jyothsna explained the definition of "antisymmetric inner product. In third part I presented on "Finding interaction between electrons of three groups in a row". I was little bit tensed in the middle of the presentation but after that I am OK with my presentation. After me its Chelsie, presented on the new formula. After Chelsie Jyothsna continued with "Three groups in a row". At the last Srikanth presented on future work.