Week 15 April 12-16: Work in Groups on Project 2

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Overview of week 15, April 12-16

- We have three project groups based on the selection below
  1. Time-dependent Hartree-Fock with material
  2. Neural Networks and Boltzmann Machines with material
  3. Quantum Machine Learning with material

Schedule. The groups meet each Thursday at 2.15pm for theory lectures and discussions till approx 4pm. The remaining three hours are dedicated to project work. We meet first in plenum and then go different breakout rooms. The group teachers and discussion partners are

1. Group 1 TDHF: Øyvind
2. Group 2 NN+Boltzmann machines: Morten
3. Group 3 Quantum Machine Learning: Kristian Wold and Stian Bilek

Alternatives for project 2

1. Fermion VMC, continuation of project 1
2. Deep learning applied to project 1, either neural networks or Boltzmann machines

3. Hartree-Fock theory and time-dependent theories
4. Many-body methods like coupled-cluster theory or other many-body methods
5. Quantum computing and possibly quantum machine learning
6. Suggestions from you