Physics Projects Course 2nd **Semester, 5752**

Suggested Project Titles

B. Svetitsky

1. Cryogenic neutrino detection (Stodolsky)
2. The solar neutrino problem (Bahcall)
3. Astrophysical dark matter
4. Double β decay
5. Cold fusion – what was wrong with it?
6. Intermediate-range fifth force and Eotvös experiments
7. Electron-positron pair creation from superheavy nuclei (GSI)
8. Simpson's 14 keV neutrino
9. Counting neutrino flavors at LEP
10. The quark-gluon plasma
11. High temperature superconductivity
12. The quantum Hall effect
13. Supernova SN1987a
14. Thermodynamics of black holes
15. Wormholes and baby Universes
16. Big bang baryogenesis
17. The Skyrmion – a proton without quarks?
18. Neutrino mass