

*Topics for lectures and student presentations (preliminary)*

	Topic	Name	Date
1	Introduction to the course	VK	25/09
2	Discovery of the neutron and the positron	VK	27/09
3	Discovery of the muon and the pion	VK	02/10
4	Strangeness	VK	04/10
5	Resonances	VK	09/10
6	Antibaryons: discovery of the antiproton	VK	11/10
7	Antibaryons: discovery of the antineutron	VK	11/10
8	Experimental evidence for neutrino	Group 1 – taken	16/10
9	Evidence for two neutrinos	Group 1 – taken	16/10
10	Parity violation	Group 1 – taken	16/10
11	Kaon system: discovery of the $K_L^0$	Group 2 – taken	18/10
12	Kaon system: CP violation	Group 2 – taken	18/10
13	Nucleon structure: $ep$ elastic scattering	VK	23/10
14	Nucleon structure: $ep$ inelastic scattering	VK	23/10
15	Nucleon structure: $vp$ inelastic scattering	VK	25/10
16	Quarks, gluons and jets: quark jets	VK	25/10
17	Dark matter search (Dark Matter Day)	VK	30/10
18	Discovery of the $J/\psi$	Group 3 – taken	01/11
19	Charmed mesons	Group 3 – taken	01/11
20	Tau-leptons	Group 3 – taken	01/11
21	The fifth quark: discovery of upsilon	Group 4 – taken	13/11
22	The fifth quark: B-mesons	Group 4 – taken	13/11
23	Quarks, gluons and jets: gluon jets	VK	15/11
24	Quarks, gluons and jets: UA2-experiment	VK	15/11
25	Neutral currents	VK	20/11
26	W-bosons	VK	20/11
27	Z-bosons	VK	22/11
28	Neutrino mass and oscillations	Group 5 – taken	27/11
29	Solar neutrinos	Group 5 – taken	27/11
30	LEP and LHC experiments	Group 6 – taken	04/12
31	Discovery of the top-quark	VK	06/12
32	Discovery of the tau-neutrino	VK	06/12

Group 1: Tom Guyah, Sam Shaw, Lewis Perry, Robbie Neal, Toby Severs, Alex Brown

Group 2: Ronan Swift, Josh Berry, Mitch Norfolk, Kate Garner, Rob Foster

Group 3: James Wells, Benjamin Harris, Rosie Elliot, Isaac Pepper, Vatsal Mandalia, Klaudia Wawrowska

Group 4: Chonghao Wu, Rongrong Song, Charles Holligan, Paules Zakhary

Group 5: Alana Matthews, Owen Stone, Rebecca Houghton, Freya Bottom, Lisa Scaife, Bethan Easeman.

Group 6: Harrison Thurlow, Varsha Senthilkumar, Callum McEwan, Daniel Barry, Danielle Clarke, Russell Ellis.