**IB Physics**

**Feynman Diagrams Group Quiz**

Name

Examples: (Read Oxford 300-302)





Beta Decay Beta Decay Muon decay Tau decay

Draw the following Feynman diagrams:

|  |  |
| --- | --- |
| B- decay: n → p + e- + υe | B+ decay: p → n + e+ + υe |
| μ- decay: μ-  → υμ + e- + υe | μ+ decay: μ+ → υμ + e+ + υe |

|  |  |
| --- | --- |
| τ- decay: τ-  → υτ + μ- + υμ | τ+ decay: τ+  → υτ + μ+ + υμ |
| Electron - electron collision: (Label the exchange particle) | Neutron proton Collision: (Label the exchange particle) |
| Proton electron collision: p + e- → n + υe | Two types of Neutron electron Neutrino collisions:n + υe → υe + n and n + υe → p + e- |