

ERRATA U 3& 4

OXFORD PHYSICS FOR QUEENSLAND U3&4 (2025)

Module	Error	Correction	Updated digital online	Update print version
13.1	<p>Mesons 13.1 page 560</p> <p>Mesons are named from the Greek “mesos”, meaning “middle”, because they are between protons and electrons in mass. Mesons are part of the hadron particle family and are defined simply as particles composed of a quark and an antiquark bound together by the strong nuclear force. All mesons are unstable, with the longest lived lasting for just under a second. They can carry an electric charge of -1, 0, or $+1$. Some examples of mesons are shown in Figure 3. The first meson is called a pion (π^+) and is shown in Figure 3A. It is made up of an up quark and an antidown quark (\bar{d}) and has a net electric charge of $+1e$. In this example the colours are red and antired (cyan), which add to white when combined. This is called colour neutral (white); all composite particles must be colour neutral.</p>	<p>$u\bar{d}$</p>		