## Physics & Philosophy: background reading in Philosophy

The philosophy of physics is studied in the first three years of the Physics and Philosophy degree, and can also be studied in the 4th year, when one has the option of taking the advanced philosophy of physics paper. Some of the books below will give you an idea of what the philosophy of physics involves. The other books will give a taste of what studying philosophy more generally can include.

## Philosophy of Physics

The End of Time by Julian Barbour (Weidenfeld & Nicholson, 1999). Barbour's work is closely connected to the debate between Leibniz and Clarke concerning the nature of space and time. Part 2 of his book, in particular, is excellent background reading for the 1st year course.

*Leibniz–Clarke Correspondence* (Manchester University Press, ed. by H. G. Alexander). The first year, philosophy of physics set text. Now also available online via the Newton Project (Clarke's original translation) and, as a modern translation, via Jonathan Bennett's earlymoderntexts.com.

Quantum Physics: Illusion or Reality? by Alastair Rae (Cambridge University Press, 2nd edition 2004). This is an excellent introduction to some of the philosophical problems that quantum mechanics poses. The philosophy of quantum mechanics is studied in the 3rd year of the course.

Quantum Mechanics and Experience by David Albert (Harvard University Press, 1992).

*Everywhere and Everywhen* by Nick Huggett (Oxford University Press, 2010). An introduction to philosophy of physics written by a former Oxford Physics and Philosophy student, now a philosophy professor at the University of Illinois at Chicago.

## **More Philosophy**

Riddles of Existence: A Guided Tour of Metaphysics by Conee and Sider (Oxford University Press, 2005). An excellent introduction to some central problems in metaphysics that will give you a flavour of how philosophy is done by some of the leading figures in the subject today.

**Think** by Simon Blackburn (Oxford University Press, 1999). An introduction to some of the central topics in metaphysics and epistemology that you study in the 1st year and beyond.

*Logic*, **2nd edn, by Wilfrid Hodges (Penguin, 2001).** This used to be the set text for the introductory logic course at Oxford. It is still useful background reading.