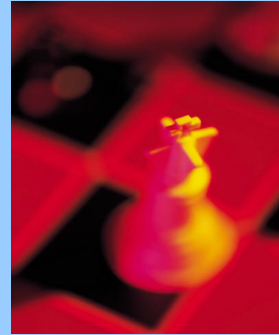


## The Unpredictability of Life

By Professor Desmond Johnston



The game of life is a set of simple rules about the survival, birth and death of 'cells' living on a square checkerboard. These rules were first thought up by a Cambridge mathematician, John Conway, to while away his coffee breaks, but he (and many others) became fascinated by the amazing patterns of incredible complexity that appeared as generations of cells evolved.

The talk describes the rules of the game and with the help of the audience, investigates how slightly different starting patterns evolve in completely different ways. We find that the game of life, just like the real thing, is totally unpredictable.

This talk includes a number of workshop activities and is best suited to small groups. Students will need access to computers. It is suitable for students in primary school and S1 and S2.

Professor Desmond Johnston is Head of the Mathematics Department of Heriot-Watt University.

### Curriculum Links

- **5-14 Mathematics: Problem solving and enquiry; Number, Money and Measurement**

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Photos courtesy of Professor Johnston