Philip Ball Lecture



From the Curator of Museum Services at the University of Dundee :

Our celebrations of the centenary of D'Arcy Thompson's On Growth and Form continue on Wednesday 22nd November at 6pm with a free public lecture by renowned science writer and broadcaster Philip Ball in the D'Arcy Thompson Lecture Theatre, Tower Building, entitled **From Natural Patterns to Self-Organisation**.

Patterns, regularities and order appear spontaneously in the universe over an immense range of scales in space and time. Not only does such organisation seem to challenge the universal thermodynamic tendency towards an inexorable increase in entropy and disorder, but these patterns often share similar forms and features in systems that seem to have no relation to one another.

It has become increasingly clear that there are organising processes in nature that operate according to very general principles, insensitive to (or at best merely fine-tuned by) the details of a particular system. At the same time, the delicate interplay between chance and determinism in these situations is able to engender immense, seemingly endless variation on a few basic themes, as in the case of snowflakes.

On Growth and Form was the first great synthesis of this combination of universality and variety in natural pattern and form. But only in modern times have we had the conceptual, computational and experimental tools to do his intuitions justice.

In this free lecture, Philip Ball will look at where our understanding of these processes has come over the century since the book's publication. A former editor of Nature, Ball recently presented a BBC Radio 4 documentary about D'Arcy Thompson and is the author of Nature's Patterns: A Tapestry in Three Parts.

The lecture is free but please book a place <u>here</u>.