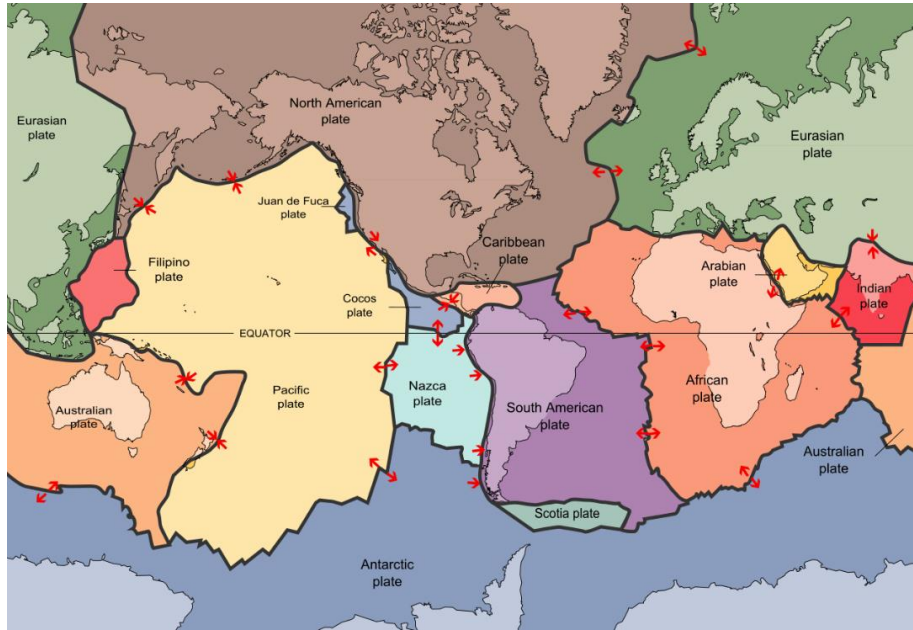


# Café Scientifique Headingley

Monday 13 May 2019 at 7:30pm

## Drifting Plates and Shifting Boundaries: What 50 years of plate tectonics tells us about planet Earth by Sue Bowler (in conjunction with Headingley Festival of Ideas)



**Outline:** The late 1960s saw a revolution in the geosciences, as plate tectonics rapidly became the accepted paradigm for understanding the evolution of the ocean floor, in terms of rigid plates with boundaries characterised by earthquakes and volcanoes. Data - topographic, seismic, magnetic - drove the changes; the new instruments that collected it came, paradoxically, from both warfare and international collaboration. The result was that geophysics became a global science, as it remains today. Plate tectonics remains a powerful framework for understanding the movements of the Earth's surface and the hazards they bring to human life, but the nature of plate boundaries on the continents - where most people live - continues to be challenging. Overall plate tectonics gives us a framework for understanding Earth as a planet and comparing it to other planets that might - or might not - hold life.

**Sue Bowler** always wanted to be an astronaut. She watched the Apollo moon landings on tv and assumed that astronauts would soon be walking on the other planets in our solar system. After a short stint working as an astronomer at the Royal Greenwich Observatory at Herstmonceux, Sue went to Cambridge University and discovered geosciences, including plate tectonics. She came to Leeds University to research the way that thrust faults make orogenic mountain belts, using field examples from Scotland and the Alps. Then she ran away to join the circus, joining *New Scientist* magazine as Earth Sciences Editor, commissioning and editing articles on everything out to the heliopause. Sue has been editing science magazines ever since, notably the fellow's magazine of the Royal Astronomical Society, *Astronomy & Geophysics*. She also taught for 20 years in the Schools of Earth and Environment and Physics and Astronomy at the University of Leeds, where she is now a Visiting Research Fellow.

**Venue:** The New Headingley Club, 56 St Michael's Rd., Leeds LS6 3BG

**Time:** Club opens at 7:00pm for drinks & the room at 7:30; talk begins promptly at 7:45pm

**Entry:** Donation please for room hire and expenses: **£3 at the door**



Café Scientifique Headingley is a programme run under the auspices of the  
Headingley Development Trust [www.headingleydevelopmenttrust.org.uk](http://www.headingleydevelopmenttrust.org.uk)