



ANNE-CHRISTINE DAVIS

COUNTRY	United Kingdom
AFFILIATION	University of Cambridge, United Kingdom
FIELD OF RESEARCH	Particle cosmology, modified gravity theory, such as the chameleon model and related scalar-tensor theories of gravity

$$S = \int d^4x \sqrt{g} [R + D_\mu \phi]^2 - V(\phi)] + S_m(\psi, A(\phi)g_{\mu\nu})$$

*"I realised that to understand physics, one has to understand mathematics; that the two are intertwined, and **you can't do physics without mathematics.**"*

*"When I came out of my PhD viva [at the University of Bristol] one of the lecturers said, "Congratulations ... so when are you going to get married?" I was really quite shocked. Cambridge was [also] quite a hard place to be a woman. Slowly **things have improved, and now it's changed completely. It's changed out of all recognition.** Quite a lot of that was down to an inspirational head of department it had, years ago now, David Crighton, who set the ball rolling."*

*"One of the eureka moments was actually writing down this chameleon theory, and suddenly realising that it worked like this: we have this screening around the fifth force when matter is dense. **Suddenly realising that on the piece of paper you've got there's the correct idea and thinking 'Wow, that's incredible!'**"*

