## Unconventional ideas in science: ready for the Nobel Prize award, or sent to the hell of heretics? Experiences in the hall of scientific fame – Brian Josephson (Physics), University of Cambridge (Great Britain)

The fate of a new idea is unpredictable: regardless of merit it can indeed end up either with a Nobel Prize or in the 'Hell of Heretics' (or more simply be ignored as 'nonsense'). The concept of 'clash of knowledge' applies in that the new claims are rejected because they appear to clash with existing beliefs. But some beliefs seem to be 'set in stone' or are considered unchallengeable or axiomatic in a way that others are not (e.g. 'time travel' and 'warp drive' can be talked about in polite company, since flights of fancy in conventional science turns these ideas up, while 'telepathy' remains taboo). Even then, some are more a source of emotions such as anger than others, and this can lead to attacks on the individuals concerned as well as on the claims themselves.

Two topics of particular interest in this connection are those of 'memory of water' and 'cold fusion'. They share the feature that the claims have been strongly attacked, on grounds that are ultimately invalid, and yet the consensus view seems unshakable. Dominant themes that arise are censorship, power and fear. Those in power, such as editors, or the anonymous editors of a preprint archive, can block the appearance of ideas deemed heretical, ensuring that the ideas and the arguments never come to the attention of open-minded readers who would be able to see that there may be flaws in the consensus position. Fear also plays a role in that editors may fear they will be attacked, and scientists may keep silent about their opinions in case their position should become insecure if they speak out ('reasons' may be found why a person should not continue in his/her current position). If official communications are blocked, personal contact may become the only mechanism whereby clearer views can be propagated.