

A chimpanzee is shown in a forest setting, perched on a mossy log. The chimpanzee has its mouth open, as if it is calling or speaking. The background is filled with green foliage and tree trunks, creating a natural, wild environment. The overall image has a slightly desaturated, greenish tint.

# WHY SCIENTISTS OPPOSE COLD FUSION

The Chimp, The Chef, and The Rabbits .  
Guardians of the Threshold of Impossibility.



## FOOTPRINTS IN THE SNOW – an unbelievable truth.

In the winter of 78/79 I nearly ran over a large Chimpanzee in a country lane. My account of this strange event, the clear data of footprints in the snow, and the theft of edibles from trashcans was not enough to make this real.

I was judged wrong or somewhat mad, after all, chimpanzees don't roam the English countryside. It was nonsense, an unbelievable truth.

*... an appealing falsehood flourishes until it becomes the accepted truth, while reality withers on the vine.* Max Weber

## **Believable Lies, Cockney 'Rabbit' (Rabbit + Pork)**

Now let us turn the other cheek, and consider the untrue things that people readily accept, lies so true that they are common knowledge.' Without any supporting data these falsehoods become beliefs deeply rooted in society

A good example of this is a claim made in 2006 by Louanne Brizendine in her book *The Female Brain*. She wrote that women speak 20,000 words a day, but men speak only 7,000. There it is, women talk so much more than men. All the time, it seems, and all of us men knew it.

Our dear *Daily Mail* newspaper declared, 'this is something one half of the population has long suspected—and the other half always vocally denied.' *The Washington Post* picked it up too, saying 'Women talk too much, and men only think about sex...'

**This was an idea whose time had arrived.**

**BUT WITH ZERO EVIDENCE- BECAUSE IT WASN'T TRUE**



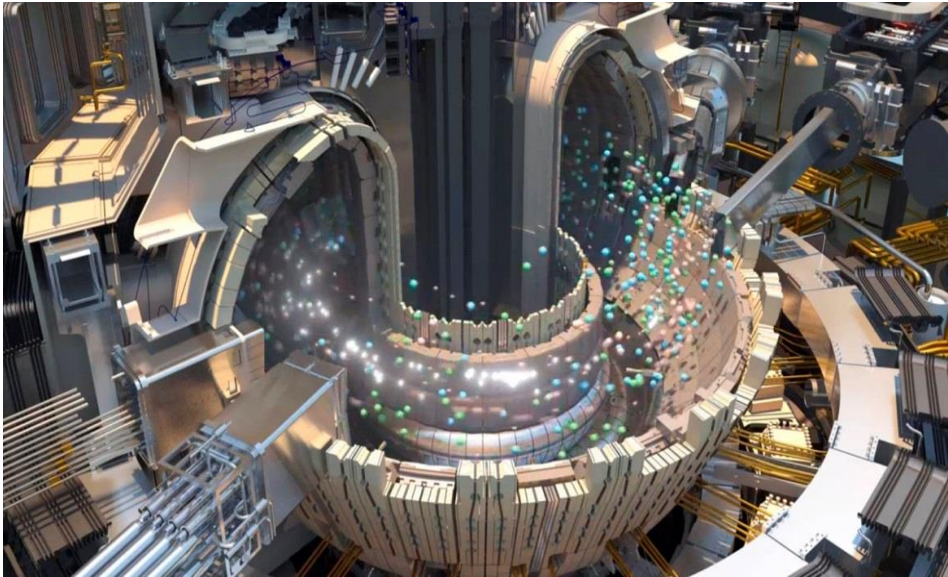


7,000



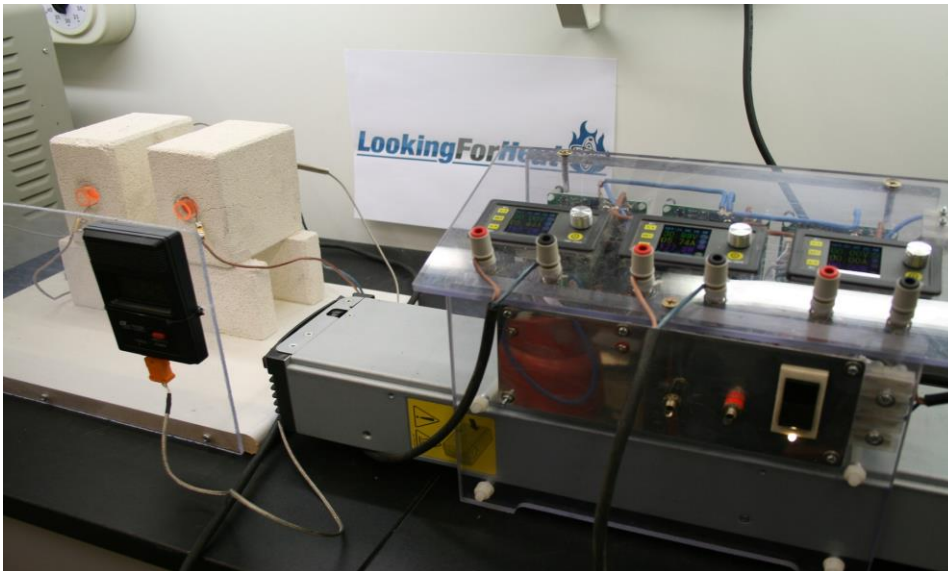
20,000

# 20,000 RABBITS CAN'T BE **WRONG**



**HOT - €2.5x10<sup>9</sup>**

PROBABLY AVAILABLE BY 2050+



**COLD -€500.00**

DEFINITELY AVAILABLE NOW

## **HOT FUSION, BLUE-WHITE STAR - IN A VERY FANCY JAR.**

**The core concept:** Terawatts of energy drives matter into a frenzy creating heat and pressure which allows atomic particles to jump the Coulomb barrier and copulate. This produces immense amounts of energy as a by-product. And lots of hot radioactive baby particles.  $E=MC^2$



## **COLD FUSION, BROWN DWARF – IN A MATCHBOX.**

**The core concept:** Watts of energy are put into a bench-top sized system which may be wet or dry, at any temperature between -269C and 1500C. Atoms are gently seduced into transmuting, releasing energy as heat or charge, often without any sign of radioactivity. Exotic materials (beyond palladium and deuterium) are seldom required.

# **HOT FUSION PROJECT – PROS and CONS.**

## **Good points.**

- 1. Huge national and international collaborative scientific endeavours with (potentially) many different outcomes in terms of adding to our theoretical and practical knowledge of the universe.**
- 2. Good PR for science – stimulates (we hope) students toward the study of mathematics, physics, hardware, and software /data engineering.**
- 3. Great employment creation schemes.**
- 4. Not disruptive in an economic or social sense. ITER is not UBER.**

## **Bad points.**

- 1. Consume a large percentage of national/international science budgets.**
- 2, Have extremely long timelines and huge budget overruns – projects have taken 35 years from go-ahead to first light.**
- 3. Clear objectives when funding applications are written that drift away like smoke once a project goes live.**
- 4. Like any high-tech device, fusion test-beds may have short lives before everybody starts to describe them as ‘obsolete.’ (Let’s build a bigger one’.) – ITER may in fact be obsolete already. But don’t tell anyone!**
- 5. Are giant physics experiments - that’s fun and interesting, but let’s not expect them to decarbonise our economy this century.**

## **COLD FUSION PROJECTS – PROS and CONS**

### **Good Points.**

- 1. Relatively simple equipment, budgets typically are \$1k-\$100k for experiments in a reasonably equipped laboratory.**
- 2. Don't demand the construction of acres of new premises.**
- 3. The experimental cycle is often rapid, weeks rather than (perhaps) a decade.**
- 4. Seldom involve any hazardous chemicals, explosions, or radiation risks.**
- 5. Promises complete new ways to create energy – the 'new fire'. Scalable, without any legacy of pollution, inexpensive – but DEEPLY DISRUPTIVE.**

### **Bad Points.**

- 1. Your results will never appear in a peer-reviewed journal.**
- 2. Your scientific colleagues will stop talking to you, and start whispering about you behind your back.**
- 3. Any results you announce will be systematically attacked and criticised not because of their quality, but because of their subject matter.**
- 4. Any major new finding may never be replicated or validated.**
- 5. You are joining (sadly) a scientific community even more dysfunctional than the one that's about to throw you out.**



## WHY THE OPPOSITION?

Science always relies on a balance between skepticism and openness to new ideas. Sometimes it is said to progress 'one funeral at a time'.

A new idea is preferably based on a HYPOTHESIS, a central supporting belief for which evidence is gathered. A good hypothesis may end up as a proven FACT. E.g. 'Smoking causes Lung Cancer.'

**BUT...CF IS NOT BASED UPON A SINGLE SCIENTIFIC HYPOTHESIS.**

CF is based on using numerous wildly differing and mostly unproven theoretical models to describe events that are reported to occur in very disparate media and environments

AT +1500C, AT -260C. IN VACUUM, HIGH PRESSURE, IN SOLIDS, LIQUIDS, GASES, PLASMAS, IN LIVING SYSTEMS AND DEEP IN THE EARTH'S CORE. IN THE SUN'S PHOTOSPHERE, IN JUPITERS 'ELECTRIC ZONES'

We are not chasing a lone monkey, CF researchers are A RABBLE CHASING A MENAGERIE.

CF is shorthand for *yes here lie significant effects not explainable by conventional physics*. Thus it is UNCONVENTIONAL PHYSICS. Many accepted things about nuclear mechanisms don't fit CF observations. Some deep electron energy level fits many much better. But as an explanation that has issues too.

## **OPPOSITION IS MANIFESTED AS DENIAL OF OPPORTUNITIES TO...**

- 1. Publish results of experiments in 'high-impact' journals.**
- 2. Get access to funding opportunities.**
- 3. Obtain patent protection for innovations.**

## **THIS TRIAD OF PROBLEMS GIVES RISE TO FURTHER DIFFICULTIES...**

- 4. Your work is unlikely to be independently confirmed. No replication of results.**
- 5. The rate and quality of your work suffers badly from lack of funds.**
- 6. Investors are reluctant to invest in unpatented or unpatentable ideas.**

**Has this opposition strengthened community cohesion in the CF field?**

**HELL NO! THE LENR COMMUNITY HAS FRAGMENTED AND OFTEN BITES ITS OWN TAIL!**

**Pitifully under-resourced in many cases, it has become a ghetto where people fight for scraps, a ghetto seemingly occupied by the passed over, the past caring, the retired, the rebellious and the rejects of conventional science. Does this matter? Of course it does.**



THESE ARE THE PEOPLE WHO CF WILL MATTER TO

## **SO- DO WE SEE HOPE AND A DIRECTION FOR THE FUTURE?**

**Head-butting the scientific establishment is doomed to failure, CF needs to perform an outflanking manoeuvre.**

### **CURRENT THOUGHTS...**

- 1. CF needs a 'Manhattan Project.' – a slam-dunk demo of something amazing.**
- 2. It needs a better mechanism for publication/PR.**
- 3. It needs more money and better internal structures to accomplish this.**

### **HOW MIGHT THIS BE ACHIEVED?**

**There is the beginning of a consensus about the 'Manhattan Project' idea. But at the moment these thoughts are a little naïve and may be stillborn.**

### **MANY IN THE FIELD ARE TOO OLD TO CARE.**

**The plan for a super new online/print journal comes and goes. Most of the keenest supporters of this idea are reluctant to give up research time to become publishers**

***‘Certainly all historical experience confirms the truth – that (humans) would not have attained the possible unless time and again(they) had reached out for the impossible.’ Max Weber’***

**THE CONSPIRACY ...** slightly edited extracts from my dialogue with Dr Edmund Storms. Ed is a nuclear chemist with over thirty years service at Los Alamos National Lab. After the announcement of cold fusion in 1989, he was one of the first replicators to find tritium production from Fleischmann and Pons’ palladium-deuterium electrolytic cells.

***“To understand the reasons for opposition to CF , we must consider how the energy shift resulting from a solid cold fusion technology would destabilize the current economics of energy supply. This business is so huge and interconnected that the threat from CF has to be fought by lobbyists, by carefully directed funding, and even by the use of ‘dirty tricks’.***

***The people in charge (of the energy economy) know that, given resources, science will eventually master this technology- resulting in economic chaos.***

***Strong evidence for this conspiracy hypothesis can be found when the nations and industries currently investigating CF are examined. Two countries desperately in need of clean energy, Japan and China, have major programs. Elsewhere companies developing mega computerised systems are beginning to invest in CF research. These entities are interested because they have needs that over-ride any potential threat***



***I predict the, eventually, a successful effort in one country will force the development of CF energy globally, as a means of (economic) self defence. Opposition has delayed this end-game, but it has not eliminated the problem. Therefore, the threat posed by CF needs to be understood and solved because this energy will eventually be available on a commercial scale.***

***To understand opposition, we must consider how cheap energy from a cold fusion technology would threaten to destabilize the energy economies. The energy economy is so huge and interconnected that the threat from CF has to be fought.***

***Right now, CF remains a challenge to understand in the context of conventional nuclear physics. Happily, this challenge is attracting the young, who will eventually discover how LENR works. The process of discovery is being accelerated by the transforming power of information, information that is easily accessed via the internet. The conventional journals no longer have the power to control information. In fact, CF is just one part of a revolution in understanding that is being catalysed, to a great extent, by the internet."***

**Cold fusion offers us the possibility of zero-carbon abundant energy, but it also represents a moral albatross. we either let the bird fly freely, or like the Lone Mariner, kill it and hang it around our necks. It is a choice that will - and must be - made.**

**CHANGE IS UNDERWAY, AS EVER WE MUST CHOOSE TO ADAPT, OR DIE.**

## A VERY BRIEF HISTORIC TIMELINE OF SOME OF COUNTLESS REJECTIONS, OPPOSITON AND NON-ENGAGEMENT WITH PHENOMENA RELATED TO COLD FUSION.

1910 -1926 Irving Langmuir. Higher than expected energy from recombination of atomic hydrogen. Claim withdrawn after dialogue with Neils Bohr.

1926/1928 Paneth & Peters. Transmutation of hydrogen into helium. Claim retracted by the authors.

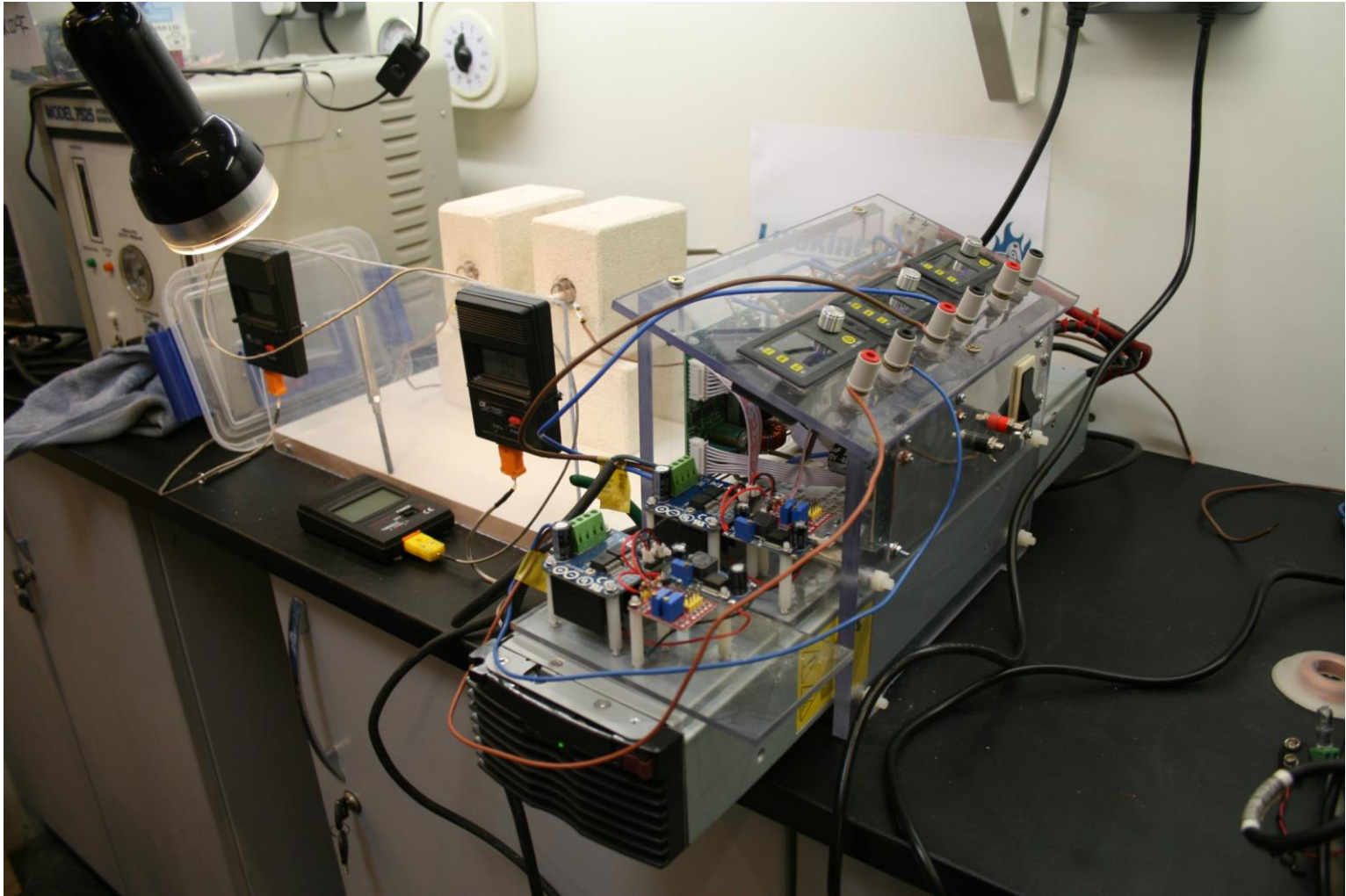
1927 Tandberg's Patent. 'Production of Helium with useful heat'. Patent withdrawn.

1946 Lord Raleigh (the 2<sup>nd</sup>.) FRS. Anomalous Heat in Metal Foils. – Ignored.

1989. Pons and Fleischman. Anomalous Heat in Palladium/Deuterium Electrolytic System. Comprehensively rejected by US DOE after just 7 months of enquiry.

1990 Stan Spzack. USN – Successful replication of P& F – ignored, then funding withdrawn.....

And ON and On and On. It would be a very long list.



This is what benchtop cold fusion looks like! Thanks for watching.