Dec 13th, 2013

The Martin Fleischmann Memorial Project (MFMP) started with the mission to explore, replicate, and openly demonstrate the reported phenomenon of Low Energy Nuclear Reactions (LENR). We knew that the process had to be totally open to bring credibility, given the questionable reputation of this field of research. We know that if we could demonstrate it, that knowledge should belong to the whole world. Defining the experiment in the blog and streaming the data live for everyone to watch, develop a community to comment, discuss raise questions, and animate the project seemed to be the best way to accomplish those goals. That's how Live Open Science was born.

Live Open Science is itself an experiment in how to collaborate. It closely mimics the wildly successful open source software movement. Linux, the open source operating system, is not owned by any single entity, and yet, it is the foundation of an several industries that are driving Humanity toward progress. Live Open Science was conceived to help us, the MFMP and our readers and collaborators, to legitimate research and results. Too often, science cherry-picks results and generalizes findings in order to attract attention and personal profit.

LENR, if validated and developed, has the potential to be the biggest improvement in human history, it would be able to profoundly impact the way we inhabit this planet. There is nothing more pressing than the continued availability of affordable and environmentally responsible energy. Without it, everything becomes more difficult, and regression become inevitable. With it, humanity can live in a world of plenty without sacrificing the ecosystem we depend on.

The potential benefits to humanity makes it worth the risk to spend our time and efforts on this, this is truly "bigger than us"! The potential risk of such a power source being restricted for the benefit of a few elites, made it worthwhile for us to do it live and open to the world. No one person, corporation, or government should have exclusive control of a technology such as this.

Just as the open process protects the longevity and existence of valuable knowledge, it also protects would be investors from being taken in by field damaging fraud. By building an open base of knowledge in the full scrutiny of the crowd, we not only break the legal barrier between the people and the technology, but we help ensure better science is done. The participants in any LOS project can become an integral part of real discovery. In the case of the MFMPs work, by helping to establish LENR, the crowd is able to play a role in freeing humanity from the negative effects of the control and scarcity of energy!

LOS as Science

The key to good science is good communication. Good scientific conclusions are the ones that can be replicated by other scientists. Live Open Science allows us to document and communicate all the details from our experiment that could not be normally fitted into a standard

write up. Things like the mechanical drawings of the apparatus, wiring diagrams, detailed materials list, supporting tests, and all the raw data can all be archived and shared to anyone seeking to understand the results.

This ability to store and disseminate the research process more accurately prevents important elements of the work being overlooked in the record. Sometimes research is not replicatable because a vital aspect was overlooked and the original researchers have long since moved on or passed on and so the potential benefits are lost to humanity. The MFMP has found itself having to rediscover old science and the difficulties not reported in that previous work. Whilst establishing challenges and omissions in previous discovery is far quicker with the distributed power of the analytical crowd, LOS promises that future scientist will have an easily searchable reference of work undertaken using the process including videos. Often research on one path reveals interesting and valuable insight pertaining to many other discoveries and having all of the process accessible will enable future scientists to get the best yield from the work undertaken.

With Internet's power, international teams of scientist are now only a click away. Through LOS, the research team is essentially anyone in the world who cares to check the blog, read the lab notebook, or watch the data stream and leave a comment. At the same time, we have seen in real time, early peer reviews of our experiments happening through our website, as well, allowing us to improve our experimental procedure rapidly, saving time and money. When we publish a formal paper, this will pay off in the form of being better prepared for a formal peer review. By being open, the chance of missing something basic is reduced and the quality and robustness of potential findings, whatever they may be, would be better and more reproduceable.

The time honored form of the scientific paper and peer review are still essential, final steps in the codification of the knowledge gained from our experiments. The way that is done can fundamentally change in this new era of connectivity in that peers can actually review the science as it happens. Within our short history, work we have done has been verified or challenged in very short timeframes, even major findings in less than a day.

The power of the internet has changed the way almost every human endeavor is now undertaken. We are in the age of the micro-multinational, where even very small companies can maintain operations in several locations around the world. Within our small team, geography is not the major obstacle. Language is not the major obstacle, either. In an internet connected world filled with educated people, time zones are actually the hardest part.

Education, connection, and working together openly to solve problems is the path toward global peace. LOS helps people recognize and work together more efficiently to resolve the major challenges our planet has ahead of it. LOS makes real, current science more accessible. It makes science much more relevant and exciting to students and enthusiasts who can follow and contribute to the discussion. It enfranchises the masses and harnesses their potentially

critical contributions whilst at the same time recording them so the importance to the path descovery can be ascribed in retrospect.

Going forward, we hope that this honor will continue to build momentum for Live Open Science. We have hopes to improve our tools and methods for communicating our scientific process better. Imagine a website that hosts live, open experiments with guides for researchers, templates to make it easy, informative live graphing with real time annotations which allowed for follower observation and comment at every step.

Gratitude

The MFMP wants to congratulate Francesco Celani, again, for his courage to support our open science approach. Thank you, also, for trying to get our mode of operation more exposure. It will help us work in a proactive manner to resolve the big challenges that face us all.

Thank you to Claudio Pace for his great words of support on his blog. This is an important step toward our final goal of making Live Open Science a self sustainable organisation where the evolution of science and accessibilty to it becomes the ultimate ambition.

Thanks you to the Vice President of the European Parliament, Roberta Angelilli for taking the time out of her very busy schedule to recognize this new, totally open approach to science.

Thanks to all the followers who have helped by contributing their time, resources and knowledge. We could not have made the rapid progress we did in our little labs without every contribution.

We humbly accept the support for our approach to our current research of everyone at this event. We, the Martin Fleischmann Memorial Project, recognize that we stand on the shoulders of giants - the generations of honorable scientists who have come before us and made the breakthroughs we know as science today.

We hope our endeavour can inspire others to get involved in our project or start research using the Live Open Science approach. Peace comes from understanding and we believe that being open is the way to enlightenment.

Thanks again to everyone.

Our work is dedicated in memoriam of the great Pr. Martin Fleischmann.