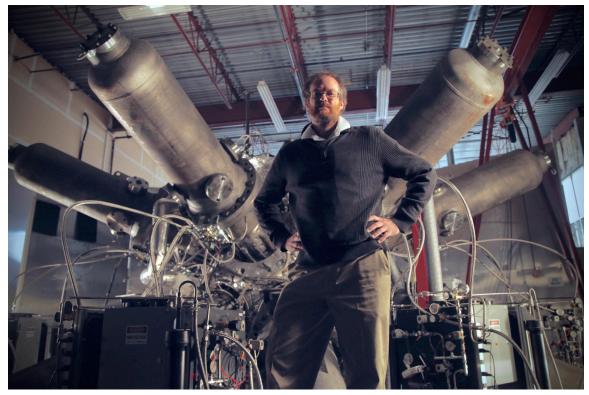


PRESENTS

LET THERE BE LIGHT



Written and Directed by Mila Aung-Thwin Co-Directed by Van Royko Produced by Bob Moore 80 MINS | Canada | 2017 | 4K

CONTACTS:

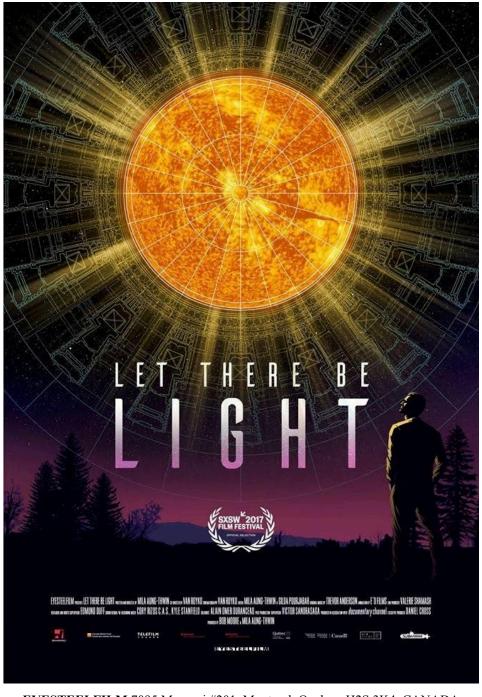
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LET THERE BE LIGHT

Written and Directed by Mila Aung-Thwin Co-Directed by Van Royko

SHORT SYNOPSIS

In the southern French countryside, a group of dedicated scientists from 37 countries around the world are building an artificial star on Earth. If it works, it can lead the way to perpetual, cheap, clean energy for all mankind. If it fails, it will be one of the biggest scientific and political blunders of all time. Meanwhile, maverick inventors in garages are also trying to unlock nuclear fusion, but for a fraction of the cost. How close are we to achieving the holy grail of energy?



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DETAILED SYNOPSIS

Nuclear fusion is known as the holy grail of energy because it's clean, abundant, and so far, frustratingly unobtainable. Obsession, fraud, and failure have destroyed many scientific careers in the world of fusion. But decades of setbacks have not stopped people from trying—in fact, they're pushing harder than ever. The world's richest countries are pooling resources to build ITER, the most expensive scientific experiment of all time (as well as a political gamble and bureaucratic quagmire). Meanwhile, private sector entrepreneurs are also racing to create fusion - only they want to do it much faster and cheaper.

The film focuses on two brilliant scientists dedicating their lives to fusion, each taking a drastically different route. Mark Henderson is a plasma physicist who plays a tiny but vital role at ITER: he's helping to build the part that would 'turn on the sun'. Michel Laberge was an ace-printer technician who turned his mid-life crisis into a new business venture: a company called General Fusion that wants to 'achieve ignition' in only 3-5 years. As crazy as that might sound, General Fusion is building momentum, attracting investors from Silicon Valley to the government of Malaysia.

Humankind's insatiable thirst for energy has led to an at times quixotic push for definitive solutions. Let There Be Light focuses on the very human characters behind the science, and look at what motivates someone to dedicate their life to fusion. Are these visionaries on the cusp of a major breakthrough, or lost on an impossible quest?

FILMMAKER'S STATEMENT

From about the dawn of mankind until about 1920 no one had any idea how the sun burned. Ever since scientists figure out fusion, they realized how perfect an energy source it is and have been trying to crack it ever since. They've been progressing slowly over the years. I started researching the film in 2012, shooting in 2013. Shot in USA, Russia, Japan, France, Germany, Italy.

We started out wanting to make a film simply about the future of energy, because when it comes to both prosperity and world conflict, there seems to be nothing more integral. Every slight shift in oil prices has a ripple effect across the entire economy. At the same time, the spectre of climate change is omnipresent, yet so another disaster - what happens when we run out of fossil fuels? There seemed to be no bigger issue than energy. So we looked at possible (non fossil-fuel) energy sources of the future. But for a long time, fusion did not even come up! Solar, wind, algea - all these newer technologies have made a lot of progress recently. But slowly in the background, scientists have been working on nuclear fusion, making progress for decades. And if it turns out to be viable, it really does change how we look at the future.

Once we latched on to the idea of fusion, it took 4 years. And basically we did most of our learning in the field while filming.

I love science but I also love science fiction. And fusion seems to have a history of not knowing which of those categories it belongs to. There is a long history of wishful thinking, of self-delusion, even fraud. People call it the Holy Grail of energy, and so people get obsessed, and others dismiss it. To me, that made it even more fascinating.

Recently I looked back at my journal of early days of filming. The first question I had for one of the scientists, 4 years ago, was basically, "Dude, what IS energy, anyway." I am embarrassed to say I didn't have any working knowledge of physics before starting this project. I think that helped, in a way, we found scientists who were patient, passionate, and very good explainers. The heart of the thesis did not change that much, but the execution sure did. From the beginning I wanted to focus on the inventors, and the almost religious belief system that led them to dedicating their lives to fusion. Many of them describe themselves as workers in the middle ages building a cathedral - they might be long dead before the final monument is completed. But exactly how that story was told changed constantly.

The biggest problems were making it understandable, and finding the story. Fusion reactors are probably the most complex things ever built. Then there is the fact that none of the devices I filmed are likely to actually be turned on for decades. It could take another 50 years - or even 200 years - before we have a functioning fusion power plant that feeds energy to the grid. I find that amazing, that people can be working on a machine that takes more than a century to build. And, it was very hard to come up with a classic "climax" for a movie.

I think we got lucky because people who make fusion are very enthusiastic about what they are doing, and want their story told. So they allowed us very good access. I think the cinematography (by Van Royko) in this film is extraordinary because of that, we were really allowed to play around next to these very complicated machines! Also, since the film encompasses lots of historical components, we employed lots of animation, and I think those sequences are just magical.

I think the people who think long-term in this society are true heroes. It is hard enough to think past a 4-year election cycle, or your own lifetime, or your children's lifetime. These scientists are building off ideas from almost 100 years ago, and planning machines that will provide energy thousands of years from now. People who think long term should be revered by society, because they are so rare.

My biggest ongoing influence is filmmaker Daniel Cross, who I've been working with for almost 20 years now. He constantly challenges my sense of narrative - and makes me examine imagery and symbolism. I like to read a lot of fantastic stories, so I would say that the themes and imagery of Kurt Vonnegut and Haruki Murakami are always bouncing around in my head. When I was making this film, the two competing cinematic futurist visions were probably "Stanley Kubrick's 2001" and Andrei Tarkovsky's "Solaris." Very much like the competing Soviet and American fusion devices.

Overall, one of the main things is I really feel that I just scratched the surface of this topic. I think of this film as part one. I would really like to return to it every decade until I die.

Mila Aung-ThwinDirector – Let There Be Light

FILMMAKERS BIOS

DIRECTOR/WRITER/PRODUCER

A two-time Emmy winner, **Mila Aung-Thwin** was named as one of Playback magazine's "NEXT 25" list as an emerging producer/director. He is co-founder and co-owner of EyeSteelFilm, a documentary film and interactive media company that is dedicated to bringing social and political change through cinematic expression. EyeSteelFilm was named to Realscreen magazine's "Global 100" list of top non-fiction companies in the world in the past few years. Mila served as the President of Montreal's International Documentary film festival, RIDM.

CO-DIRECTOR/DIRECTOR OF PHOTOGRAPHY

Van Royko, MA, CSC is a filmmaker and director of photography from Montreal, Qc. He is best known for his award-winning cinematography for the feature documentaries 'Monsoon' and 'Koneline'. With these films among others, Van has consistently employed an expanded vision of cinematography, using novel technologies and aesthetic techniques to tell truly cinematic stories.

Over the course of his career, Van has collaborated with world-renown directors and producers Yung Chang, Mila Aung-Thwin, Nettie Wild, Sturla Gunnarsson and the Oscar-winning Denys Arcand, on projects ranging from advertising campaigns and music videos, to art installations and feature documentaries. In the past year, Van has shot several new films and TV series including the highly regarded CBC series Interrupt the Program. He is also currently co-directing two documentaries with Eye Steel Film.

PRODUCER

Bob Moore is a Creative Producer and Co-President of EYESTEELFILM in Montreal, specializing in the creation of cinematic documentaries such as *Last Train Home*, *China Heavyweight*, *I Am the Blues*, and *Forest of the Dancing Spirits*. With partners Daniel Cross and Mila Aung-Thwin, Bob has produced films that have been recognized by international awards including the Emmys and Golden Horse, as well as numerous festival grand jury awards. Bob also oversees EYESTEELFILM's theatrical distribution company and its new Creative Reality Lab, which focuses on meaningful interactive and immersive storytelling. He has degrees in Philosophy, Fine Art, and Law, and regularly lectures at and consults with film institutions around the world.

SUBJECTS' BIOS

At age 14, **Mark Henderson** decided to become plasma physicist and work on solving nuclear fusion as a way to solve the energy crisis. He works on the ITER in the south of France, the world's most ambitious scientific experiment designed to ignite a small star on Earth. Now in his mid-50's, he is frustrated by constant delays on the project and wonders if he will see it to completion. He compares himself to someone in the Middle Ages helping to build a cathedral that will take generations to achieve.

Michel Laberge was a laser printer technician who underwent a mid-life crisis, and age 40 quit his job and decided to focus on "saving the planet and becoming filthy rich." His launched the start-up General Fusion and wants to achieve ignition (the point when a fusion reaction ignites like a star and becomes sustainable) in only 3-5 years, which he is confident he can achieve - if he doesn't run out of capital.

Eric Lerner worked as a science journalist for many years, before turning his attention to fusion. With only 3 other team members, he has built a "focus" fusion device in a low-rent storage facility in Middlesex, New Jersey. He claims the results of his machine are "the best" of all the private companies', but is critical that all the research money is being taken up by the ITER device.

FULL CREDIT LIST

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THROUGH THE THEATRICAL DOCUMENTARY PROGRAM

PRESENTS **LET THERE BE LIGHT**

WRITTEN & DIRECTED BY MILA AUNG-THWIN

CO-DIRECTOR VAN ROYKO

PRODUCED BY BOB MOORE MILA AUNG-THWIN

EXECUTIVE PRODUCER
DANIEL CROSS

EDITED BY
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GILDA POURJABAR

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CINEMATOGRAPHY BY VAN ROYKO C.S.C.

A FILM BY MILA AUNG-THWIN

AN EYESTEELFILM PRODUCTION

CO-WRITER BOB MOORE

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