

BLAST!

WELCOME TO ASTROPHYSICS INDIANA JONES STYLE!

Dear Writers: In the text below, we have made an effort to avoid spoilers, just as fiction films do. **BLAST!** is structured as a suspenseful adventure story, and by not revealing the ending, our intention is to maximize enjoyment for the viewer.

Dear Science Writers: Please be aware that **BLAST!** does not contain extensive, detailed science explanations. Instead the **BLAST!** narrative focuses on the humanity of the scientists. With this intention, a basic understanding of the science is all that is required for a general audience to follow the story and to understand the stakes and motivations of the mission.

LOGLINE

BLAST! is astrophysics Indiana Jones style, a spectacular and suspenseful story of space exploration!

SHORT SYNOPSIS

BLAST! is astrophysics Indiana Jones style, a spectacular and suspenseful story of space exploration! Five-time Emmy winner, Paul Devlin, follows his brother, Mark Devlin, PhD to five continents, from the Arctic to the Antarctic to launch a revolutionary new telescope on a NASA high-altitude balloon. They hope to look back in time to reveal a hidden Universe of never-before-seen starburst galaxies. From catastrophic failure to transcendent triumph, their adventure reveals the surprising real life of scientists.

ALTERNATE SYNOPSIS

Welcome to astrophysics Indiana Jones style!

Five time Emmy winner Paul Devlin follows the story of his brother, Mark Devlin PhD, as he leads a tenacious team of scientists hoping to figure out how all the galaxies formed by launching a revolutionary new telescope under a NASA high-altitude balloon.

Their adventure takes them from Arctic Sweden to Inuit polar bear country in Canada, where catastrophic failure forces the team to try all over again on the desolate ice in Antarctica. No less than the understanding of the evolution and origins of our Universe is at stake on this exciting escapade that seeks to answer humankind's most basic question, How did we get here?

BLAST! is about the crazy life of scientists. Their professional obsessions, personal and family sacrifices, and philosophical and religious questioning all give emotional resonance to a spectacular and suspenseful story of space exploration.

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LONG SYNOPSIS

Filmmaker Paul Devlin grew up in a family of scientists. He spent summers at the high-energy accelerator, Fermilab, where his particle physicist father was on the team searching for the top quark. One brother attended MIT and the other, Mark, became a prominent astrophysicist at the University of Pennsylvania.

Mark invited Paul to Arctic Sweden to document the launch of Mark's groundbreaking telescope, BLAST - **B**alloon-borne, **L**arge **A**perature, **S**ub-millimeter **T**elescope. BLAST is designed to gather information on how our universe evolved by collecting the very faint sub-milimeter light from thousands of the earliest galaxies ever detected. To see these celestial births, the telescope must go through a risky launch on a NASA high-altitude balloon and float above the atmosphere for several days before it lands in Arctic Canada.

When Paul arrives in Sweden, tensions within the collaboration are high as technical obstacles and the worst weather in decades have delayed the experiment for weeks. After a turbulent launch the scientists are devastated to discover that the telescope has a fatal flaw during its 4 days afloat. Then, a harrowing recovery in the Inuit polar bear country of Arctic Canada results in catastrophic destruction, forcing the scientists to try all over again on the ice in Antarctica.

Eighteen months after the disasters in Sweden and Canada, Mark and his team head to McMurdo Station, Antarctica, the most remote research base on the planet. Having learned from mistakes in Sweden, the scientists cautiously anticipate success. "I can't think of anything that really went wrong... so far" declares Mark just prior to launching the multi-million dollar telescope above the atmosphere for the second time.

Apparently Mark spoke too soon. Will BLAST crash during the launch? Can its precious data survive being dragged 120 miles across the Antarctic ice?

The natural suspense of the BLAST process - a group of scientists overcoming one obstacle after another to unlock the secrets of the cosmos - keeps the tension of the film's narrative taut. Cliffhangers allow the story to diverge into vignettes of the science and goals of BLAST. Sophisticated, visually appealing animations illuminate fascinating concepts in a captivating, accessible way.

Moreover, **BLAST** threads through its narrative a dialogue on science and faith between two lead scientists – one an agnostic and the other a Christian. Mark Devlin and his colleague Barth Netterfield (U. of Toronto) represent opposing sides of a theological argument. Mark, an adventuring instrumentalist, has utter faith in the ability of science to answer the most difficult questions confirming his non-theistic view of the Universe. Barth, a nerdish software genius, is also a devout Christian with a refreshing outlook on the tension between science and religion. Barth views his scientific pursuit as an opportunity to peer into the mind of God. This candor has also allowed **BLAST!** to ignite debate and to inspire general audiences to reconsider the relationship between science and faith.

A FILM BY PAUL DEVLIN

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BLAST! also introduces audiences to the team of young graduate students as they candidly document each other during the early assembly process in Antarctica. As Mark says, “You can’t learn this stuff in a classroom, you gotta DO it.” Scientific ballooning is the training ground that develops future leaders of NASA.

For many people, complex scientific investigation seems obscure and impersonal. **BLAST!** immerses us in the random, haphazard, personal side of this high stakes world, both marred and enhanced by fallible human nature. The film offers insight into the motivations of passionate scientists, pursuing groundbreaking research, seeking to answer the most basic of human questions - How did we get here?

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REVIEWS

"This adventuresome spin on breakthrough science should wow 'em!" - Variety

"The capacity to blast open our understanding of the physical structure of the Universe... This absorbing documentary leads to some unexpected twists and turns and comedic hand-wringing." - New York Times.

"Combining hard science, human interest and suspense, BLAST! is a stimulating introduction to astrophysics and a fine tribute to scientists of all stripes who engage in taxing fieldwork." - Box Office Magazine

"Delicious drama that builds to an edge-of-your-seat climax." - Orlando Weekly

"The magic formula for a successful mainstream science movie. You'll laugh, you'll cry, and you'll walk away astounded." - Discovery Space

"Inspirational and aspirational!" * (4 stars) - Tim Teeman, The Times, UK***

"Devlin comes away from his globe-hopping scientific adventure with a lot of terrific footage of giant balloons rising from barren landscapes, and stressed-out theoreticians nervously watching their fragile, expensive equipment scrape across ice floes." - The Onion, A.V. Club

"[BBC's] Storyville is still TV's most unmissable programming strand, continuing to find the best in the world's documentaries. This one from Paul Devlin is a case in point. BLAST! is the simple but compelling story of the quiet, well-reasoned obsessive behaviour that must necessarily accompany groundbreaking scientific research." - John Robinson, The Guardian, UK

"A jolting, riveting ride!" - Talking Science

"An adventure tale with twists and turns, lively characters, and some lessons about life, the universe and everything. It's the character-driven approach that guarantees that we care whether they succeed." - Doc-a-Day

"One could be forgiven for mistaking BLAST! as a drama and getting lost in the plot. We may still be some distance away from a scientifically literate public, but this film is at least a thoughtful step in the right direction. A refreshing take, not only upon scientists and the practice of their art, but also on humanity as a whole." - Culture Wars

"A fascinating glimpse into life as an astronomer at the ends of the Earth." - Physics World

(Complete list of reviews with links at <http://www.blastthemovie.com/reviews.html>)

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STATUS

BLAST! premiered spring 2008 at the Hot Docs film festival in Toronto, the largest documentary film festival in North America. Since then it has at film festivals around the world. (<http://www.blastthemovie.com/screenings.html>).

BLAST! has co-production partnerships with BBC Storyville, Discovery Channel Canada, SVT Sweden, and YLE/FST Finland. **BLAST!** has been seen by over a million viewers via broadcasts on PBS through APT syndication, BBC, Discovery Canada, SVT Sweden, YLE Finland, VPRO Netherlands, DR Denmark, and NHK Japan, GA&A Italy and Al-Jazeera. An upcoming broadcast in August 2010 with BBC world **BLAST!** will reach hundreds of millions of households and hotel rooms in over 120 countries.

BLAST! was featured on Comedy Central's *The Colbert Report* (<http://bit.ly/aNsUy6>) and NPR's *Science Friday* bringing science and STEM themes to mainstream audiences.

BLAST! is an official Special Project of the International Year of Astronomy, 2009 (IYA2009). The movie had a prestigious screening at UNESCO headquarters in Paris as part of the Opening Ceremonies of IYA2009.

Director Paul Devlin was awarded the New York State Council of the Arts (NYSCA) Individual Artist Grant for **BLAST!**, totalling \$25,000. BLAST! received a Best Documentary Award at Vedere la Scienza Festival, Milan, Italy. **BLAST!** was shortlisted for a prestigious Grierson Award at the Sheffield Doc/Fest, UK.

The BLAST scientists have published their first results in the prestigious science journal *Nature*, making a major astronomical discovery, which generated press attention worldwide.

The ongoing distribution goals of **BLAST!** include reaching universities and high schools across the world to inspire young audiences to explore the exciting developments in science and to pursue scientific careers. **BLAST!** has already screened at many schools, planetariums, and museums around the world, and the producers are planning to continue the screening tour and speaking engagements through 2011.

ARTISTIC STATEMENT

"Why don't you come to Sweden and shoot BLAST?" my brother said casually as he dropped me off at the train station. An astrophysicist, he was soon traveling to Northern Sweden, above the Arctic Circle, to head up a major scientific project launching the sophisticated telescope BLAST on a high altitude balloon with NASA. With only a few weeks to prepare, it seemed like a crazy idea to follow my brother to Sweden to shoot what, a telescope? Is that cinematic?

But I am drawn to the impossible movie. My film *Power Trip* is about the post-Soviet electricity crisis in Tbilisi, Georgia. At first glance, dry and dull. But by focusing on the human conflict, fascinating absurdities, and overwhelming corruption of this situation, I found an accessible

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window into the otherwise abstract transition from communism to capitalism. On *Power Trip*, I worked alone, gaining intimate access by using a small mini-DV camera and developing the trust of my subjects with re-visits over two and a half years. The editing process required meticulous digestion of complex material in order to make it accessible, benefiting from the feedback of countless test screenings.

So, now my brother thinks I should do a movie about his telescope. Pretty unlikely. But the sheer audacity of the concept is impressive - tying \$10 million worth of delicate equipment to a balloon so that it can float with the wind, collecting data at the top of the atmosphere for several days, hoping that it does not land in water in Arctic Canada when it's dropped 35 kilometers from the sky.

I could see the potential tension and drama of a group of committed, passionate scientists overcoming one obstacle after another to unlock the secrets of the universe. This might provide an excellent narrative clothesline on which to hang an examination of some fascinating topics. I've always been intrigued by the mind-bending discoveries at the cutting edge of astrophysics and the inevitable confrontation of religion and science at these frontiers.

So, could I make a film about a telescope compelling and illuminate these issues? The only way to find out was to go to Arctic Sweden and start **BLAST!**, a spectacular journey that eventually led to shoots on 5 continents, including Antarctica.

PRODUCTION PERSONNEL

PAUL DEVLIN, director, editor, producer

A five-time Emmy winner for his work on NBC's Olympics and CBS's Tour de France, Paul Devlin's films include *Power Trip*, which screened in 60 countries, theatrically across the United States and on PBS's *Independent Lens*, was nominated for an Independent Spirit Award, and has won 10 film festival awards, including top prizes at Berlin, Hot Docs in Toronto, and Florida.

Paul also made the award-winning film *SlamNation*, which follows the fierce competition at the National Poetry Slam and helped popularize the dynamic genre with its release in theaters and on HBO/Cinemax and Encore/Starz. Paul's current projects include *BLAST!* and *Super Star Dumb*.

BLAST! was presented at the 2006 IFP Market and 2007 Toronto Documentary Forum attracting co-production partners BBC Storyville, Discovery Channel Canada, SVT/Sweden, and YLE/FST Finland. Paul was awarded the 2007 New York State Council on the Arts (NYSCA) Individual Artists Grant for \$25,000 through IFP fiscal sponsorship.

Other credits include his fiction film *The Eyes of St. Anthony* and his work as producing editor on the Organic Film *FREESTYLE: The Art of Rhyme*, broadcast on VH1 and winner of the Special Jury Award for Documentary Filmmaking at the Florida Film Festival.

As an editor, Paul's extensive credits include commercials, music videos, television shows and major sports broadcasts, including CBS's Super Bowls and ABC/ESPN's World Cup Soccer.

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CLAIRE MISSANELLI, producer

Claire Missanelli co-produced *Power Trip*, which won 2 jury awards at the prestigious Berlin film festival and was screened in 60 countries, including the United States. It was broadcast on PBS's Independent Lens, nominated for a 2004 Independent Spirit Award, and garnered 8 other film festival awards including best documentary feature at the Hot Docs Film Festival in Toronto. She is currently works as a producer on the documentaries *Super Star Dumb and BLAST!*, which was presented at the 2006 IFP Market and 2007 Toronto Documentary Forum. Other films include *SlamNation*, a documentary that illuminates the vibrant slam poetry movement, which broadcast on HBO/Cinemax and Encore/Starz. She also works as a consulting and outreach producer for documentary projects.

LOUISE ROSEN, Co-Producer

Louise Rosen is a media executive with over 25 years experience in international television and film finance and distribution. She has set up numerous, award-winning co-productions between producers and broadcasters around the world including recipients of the Oscar, the Emmy, the International Emmy, the Grimme Prize, the Prix Italia and Sundance Festival Awards. In addition to *BLAST!*, current projects include *Secrecy* from Robb Moss and Peter Galison (Sundance, SXSW, Tribeca Film Fests), *1000 Journals* from Andrea Kreuzhage (AFI Fest Los Angeles, Berlinale) and *Killer Poet* (Hot Docs Film Fest) and *Johnny Cash at Folsom Prison Prison* (in post production) from Northern Light Productions.