

# Sparks!

A NEWSLETTER FOR MEMBERS AND FRIENDS OF THE MUSEUM OF SCIENCE

Museum of Science  
*IT'S ALIVE!*

Not long ago, in a galaxy  
not far away...

*...a museum and a film company joined  
forces to explore how a series of science  
fantasy movies could teach people about  
real science and technology. The result  
of this powerful alliance premieres at the  
Museum on October 27...*

See story page 6

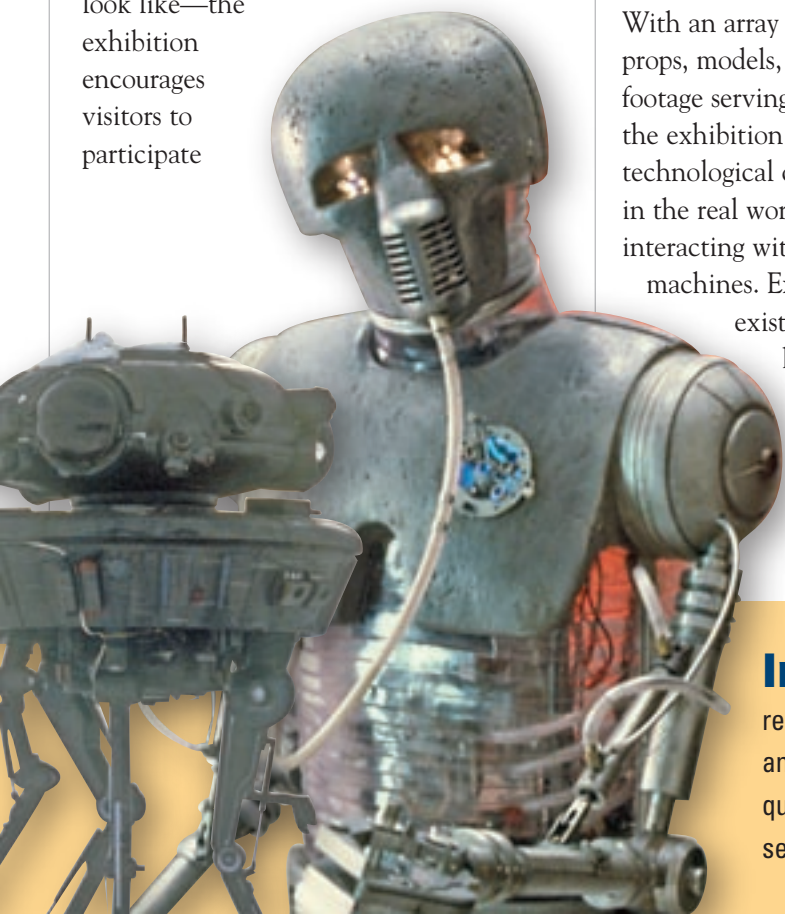


# Star Wars: Where Science Meets Imagination

Developed by the Museum in collaboration with Lucasfilm Ltd., this innovative exhibition promises to be a compelling force for exploring the creation of new technologies.

**R**ich with artifacts, clips, and concepts from the hugely popular George Lucas films, *Star Wars: Where Science Meets Imagination* puts a 21st century spin on the saga's futuristic devices by exploring similar technologies in development today. For anyone who's ever wondered, the exhibition addresses the question: Will we have anything like droids or landspeeders someday? "Most science center exhibits built around motion pictures have focused on the science, technology, and art of filmmaking," says Museum content developer (and *Star Wars* enthusiast) Ed Rodley. "In this exhibit, the science and technology in the movies inspire people to imagine the future...and how we might get there."

Using *Star Wars* as a springboard—as a shared image of what the future *might* look like—the exhibition encourages visitors to participate



in the imaginative engineering processes that yield technological advancements. As they design, test, and build prototypes, visitors immerse themselves not only in the *Star Wars* universe, but also in the current scientific knowledge that underpins technologies—and could lead to a more technologically sophisticated future.

## Making the Connection

So what do landspeeders, Rebel X-wing starfighters, and Imperial walkers have to do with real science and technology? According to Rodley, quite a lot. "There are many parallels between the films' technologies and those in real life," he says. "Our goal is to engage visitors in the creative process of both engineering and artistic design and encourage them to think about technological solutions to real problems."

With an array of *Star Wars* artwork, props, models, film clips, and documentary footage serving as a compelling backdrop, the exhibition centers around two key technological challenges in the films and in the real world: getting around, and interacting with ever more intelligent machines. Exhibition visitors examine existing prototypes such as hovercrafts, magnetic levitation (maglev) trains, and real robots. They also try hands-on design activities that reveal the

methods engineers use to create and test new ideas.

## From Repulsorlifts to Robots

For example, visitors to the transportation area learn about the "repulsorlift engines" of imagined vehicles such as Luke's landspeeder and the *Millennium Falcon* and get a taste of what it would be like to exceed the speed of light. Then they learn about Japan's real maglev train—a sophisticated, high-speed vehicle that uses powerful magnets to hover above its "track." Finally, visitors take on the design process themselves by building maglev trains out of LEGOS® and magnets. As they test their prototypes, visitors learn about the forces that levitate the train and propel it forward. They also experience some of the challenges of creating high-speed, floating technologies.

Visitors also get to imagine a world full of robots. A lineup of *Star Wars* devices, C-3PO and R2-D2 included, shows the variety of sophisticated capabilities we envision in our future machines. "Robots are one of those technologies that have been mainstays of science fiction for so long that it's sometimes hard to remember the reality of robotics," Rodley says. "Many different things have to work together to make a robot do what R2-D2 can."

**In the Exhibition** Look for interactive stations with interpreters ready to help you explore ideas about robotics, prosthetics (think Darth Vader), and real levitating objects. You can also try answering some technology trivia questions with a *Star Wars* flair. For additional exhibit-related programming, see page 10, visit [starwars.mos.org](http://starwars.mos.org), and check your next issue of *Sparks*.



**GETTING AROUND, CREATING ROBOTS**

We're not at lightspeed yet, but today's maglev vehicles share characteristics with imagined technologies such as the *Millennium Falcon*, while robots such as RobosapienV2 (below) take early steps toward the versatility imagined in machines such as *Star Wars* "probots" and medical droids (below left).

**Designing the Future**

For instance, a mobile robot must be able to avoid hazards and stay upright as it walks or rolls through the world. In the exhibition, visitors can attempt to build droids that successfully navigate an obstacle course to Queen Amidala's ship. As they test their designs, adjusting

size, shape, wheel configuration, and so forth, visitors



wrestle with the difficulties of creating versatile machines like those populating the *Star Wars* films. They can compare their ideas with some of the dizzying array of robots in use or on drawing boards today, from industrial automations to personal assistants.

According to Rodley, the exhibition's hands-on activities not only inspire people to learn more about the engineering design process, but they also encourage them to help shape our technologically advanced society. "We want visitors to see that they can play a role—as scientists, engineers, workers, consumers, and citizens—in creating the technologies of the future," he says. ●

*Star Wars: Where Science Meets Imagination* was developed in collaboration with Lucasfilm Ltd. and in consultation with the Science Museum Exhibit Collaborative. Following its world premiere in Boston, the exhibition will travel to the other members of the collaborative: COSI Columbus (Ohio); Oregon Museum of Science and Industry (Portland); California Science Center (Los Angeles); Science Museum of Minnesota (Saint Paul); The Franklin Institute (Pennsylvania); and Fort Worth Museum of Science History (Texas).

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RobosapienV2 Photo © 2005 Wowwee Ltd.



**World Premiere at the Museum of Science  
October 27, 2005 – April 30, 2006**

**Member Previews and Events  
Launch Sunday, October 23**

**EXCLUSIVE MEMBER  
OPPORTUNITIES**

Details page 11

- **Grand Member Preview**  
Sunday, October 23, 9:00 a.m. – 5:00 p.m.
- **Member Halloween Party**  
Sunday, October 23, 6:00 – 9:00 p.m.
- **Member Previews**  
Tuesday, October 25, 10:00 a.m. – 2:00 p.m.  
Wednesday, October 26, 10:00 a.m. – 2:00 p.m.
- **Members-Only Exhibition Viewings**  
Sundays, 6:00 – 9:00 p.m.  
November 20, January 22, February 12,  
March 12, April 9

**ADMISSION**

<b>Members</b>	<b>General Public</b>
\$3 per person	\$20 Adult
	\$18 Senior
	\$17 Child

- Reservations and more information: 617-723-2500, 617-589-0417 (TTY), [starwars.mos.org](http://starwars.mos.org).
- Admission by timed ticket only.
- Antenna Multimedia Tour available: add \$5 (nonmember adult), \$4 (senior, child, Member). Antenna Multimedia Tour and an Audio-Only Tour free to visitors with hearing or visual impairments.
- Public price includes a separate ticket for general Exhibit Halls admission usable on the same day or within six months of your visit to *Star Wars: Where Science Meets Imagination*.
- Advance reservations strongly recommended. No refunds or exchanges.
- Tickets purchased at the member rate are limited to the number of Exhibit Halls admissions permitted with your membership.

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