

# Stephen Hawking Centre at Perimeter Institute – Fact Sheet

31 Caroline St. N., Waterloo, Ontario, Canada

## Features:

- **55,000 extra square feet**, increasing the total size of Perimeter Institute to **120,000 square feet**
- Space for **150+ new researchers**, increasing the capacity for up to **250 scientists and trainees** over time
- **Bold and angular lines**, streams of **natural light** and **blackboards** in almost every space
- **3** new designated scientific **interaction areas** on half-levels for spontaneous, multi-disciplinary research activity
- The expansion is creatively **wrapped around** the corner of the existing facility, increasing the overall physical footprint by just 1/5<sup>th</sup>, yet doubling the size of the research complex and providing space for nearly triple the number of scientists
- **4** new formal **presentation spaces** for seminars, workshops and the expanding Perimeter Scholars International (PSI) program, and all with full audio-visual capabilities
- **State-of-the-art IT infrastructure** to support scientific visualization, the analysis of complex calculations, and conduct distant, real-time collaborations with colleagues around the world
- Certified as Ontario's first-ever '**Gold Seal project**', a national award for extremely high quality construction



## Why Stephen Hawking?

"Stephen Hawking is an inspirational figure for his scientific research, his mentorship of young physicists and his unequalled communication of a love for scientific discovery to the world over. So it is very fitting that the expansion at PI - which is similarly devoted to research, training and outreach - be named for him. We are deeply honoured that Stephen Hawking has allowed us to use his name as Perimeter takes its next step towards becoming an international focal point for foundational theoretical physics."

- Neil Turok, Director of Perimeter Institute

"The Perimeter Institute is a very exciting venture. Its chosen scientific focus - quantum theory and spacetime - is very close to my heart. I am strongly supportive of its bold expansion plans and its ambitious research and training programs. Our field of theoretical physics has been the most successful and cost effective in all of science. Where would be today without Newton, Maxwell and Einstein? Many great challenges lay ahead. Where this new understanding will lead is impossible to say for sure. All we can say with confidence is that expanding the Perimeter of our knowledge will be the key to our future."

- Stephen Hawking, Perimeter Distinguished Research Chair

## The Investment

Design and construction cost: **\$29 million**

Funding for the *Stephen Hawking Centre at Perimeter Institute* was awarded through an internationally peer reviewed infrastructure granting competition and involves a three-way public-private partnership with the federal government's Canadian Foundation for Innovation (CFI), Ontario's Ministry of Research and Innovation (MRI) and private donations.

## The Architects

The *Stephen Hawking Centre at Perimeter Institute* was designed by Teeple Architects Inc. of Toronto. Founded in 1989, Teeple Architects Inc. has built a reputation for innovative design and exceptional service, winning five Governor General's Awards for previous projects. [www.teeplearch.com](http://www.teeplearch.com)





## Why Theoretical Physics?

Theoretical physics is one of the highest impact, yet lowest cost, fields in science. Its powerful ideas have seeded innovations across all of science and technology, from mechanical engineering to wireless communication, from electronics to power generation. Its breakthroughs - such as those due to Newton, Maxwell and Einstein - advance our fundamental understanding of the universe and make possible the new technologies that transform society.

Today, the ideas of theoretical physics continue to drive and guide major experiments like the Large Hadron Collider or the development of quantum materials. The field naturally attracts some of the world's most brilliant thinkers who pursue their ideas through private contemplation, interdisciplinary collaboration and mathematical calculation. Their work is contributing key concepts to diverse fields from astronomy to neuroscience, pure mathematics to computer science. Theoretical physics is, above all, a creative field constantly reinventing itself, discovering deeper insights into nature while broadening its range of application.

## About Perimeter Institute

Perimeter Institute for Theoretical Physics believes breakthroughs are realized through a collision of intellect, imagination and inspiration. PI exists to enable the most ambitious research in theoretical physics and share its transformative power with the world.

PI is an independent, non-profit, scientific research organization that works to advance our understanding of physical laws and develop new ideas about the very essence of space, time, matter and information. PI researchers take an intense multi-disciplinary focus to their research in the areas of quantum foundations, quantum information, quantum gravity, string theory, particle physics, condensed matter, cosmology and gravitation, and complex systems.

Perimeter Institute also provides a wide array of research training and educational outreach activities to nurture scientific talent and share the importance of discovery and innovation among students, teachers and the general public. In partnership with the Governments of Ontario and Canada, PI is a successful example of public-private collaboration in scientific research, training and outreach. [www.perimeterinstitute.ca](http://www.perimeterinstitute.ca)

## Timeline

- **2000, Oct. 23:** PI launches, research begins shortly after in a temporary facility
- **2004, Oct. 2:** Perimeter moves into first custom facility at 31 Caroline St. in Waterloo
- **2011, Sept. 17:** Grand open of the *Stephen Hawking Centre at Perimeter Institute*

## Green Approach

The *Stephen Hawking Centre at Perimeter Institute* is on track to attain Leadership in Energy and Environmental Design (LEED) Silver certification for environmental sustainability. With locally sourced building materials, energy conservation measures, use of green roofs and other eco-friendly features, the new Stephen Hawking Centre is not only a bold architectural design facilitating research, training and outreach, but is a physical testament to Perimeter Institute's environmental stewardship.

## Contact Us

RJ Taylor  
 External Relations Specialist  
 Perimeter Institute for Theoretical Physics  
 519-569-7600 x5371  
[rtaylor@perimeterinstitute.ca](mailto:rtaylor@perimeterinstitute.ca)