



FONDATION H. DUDLEY WRIGHT

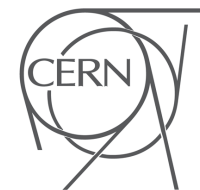
CERN
TRAVELLING EXHIBITION
PRESENTATION

“An exciting educational experience
about the universe, particles and the
value of fundamental science”

Photos taken at the exhibition in Geneva
2 April - 28 June 2009



FONDATION H. DUDLEY WRIGHT



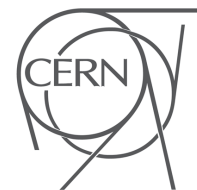
Entrance + Time tunnel

“You, the people you love and everything around you are made from particles that originated at the very beginning of the Universe.”

The entrance tunnel, takes the visitor on a trip back from today to the moment just after the Big Bang.



FONDATION H. DUDLEY WRIGHT



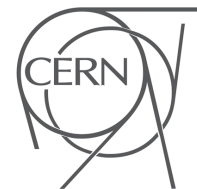


Zone 1: The Big Bang theatre

- In the centre of the zone, visitors lean over a safety rail to peer into the void beneath as if suspended over space. A dynamic, timed audio visual show, projected into this space, tells the story – from the moment of Big Bang to the present day.



FONDATION H. DUDLEY WRIGHT



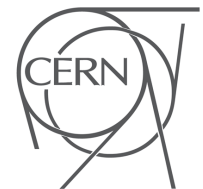


Zone 2: Particles matter

- This zone explains the nature of particles, introduces the particle ‘families’ found in the standard model, and inspires visitors to ask big questions about particles.
- The interactive elements include a facebook-type treatment explaining particle relationships, a video showing the astonishingly small scale of fundamental particles and an interactive game showing the relationship between energy and mass.



FONDATION H. DUDLEY WRIGHT





QUEL EST LE...

QU'EST-CE QU'UN ATOME?

QUEL RAPPORT DE TAILLE ENTRE UN NOYAU ET UN ATOME? HOU BIG IS A NUCLEUS

C'EST GRAND COMMENT UNE PARTICULE?





C'EST GRAND COMMENT
UNE PARTICULES?

PARTICULES:
EST-CE QU'EST-CE

As small as atoms, they are still made of matter.
It's a fundamental unit and the size of a football
pitch, the nucleus of that atom would be the
size of a small marble.

Particles that are not composed of anything
smaller are called fundamental particles.
They are the building blocks of everything
in the universe.

c

ν_e



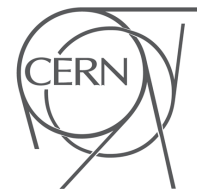
Zone 3: Mysteries of the universe

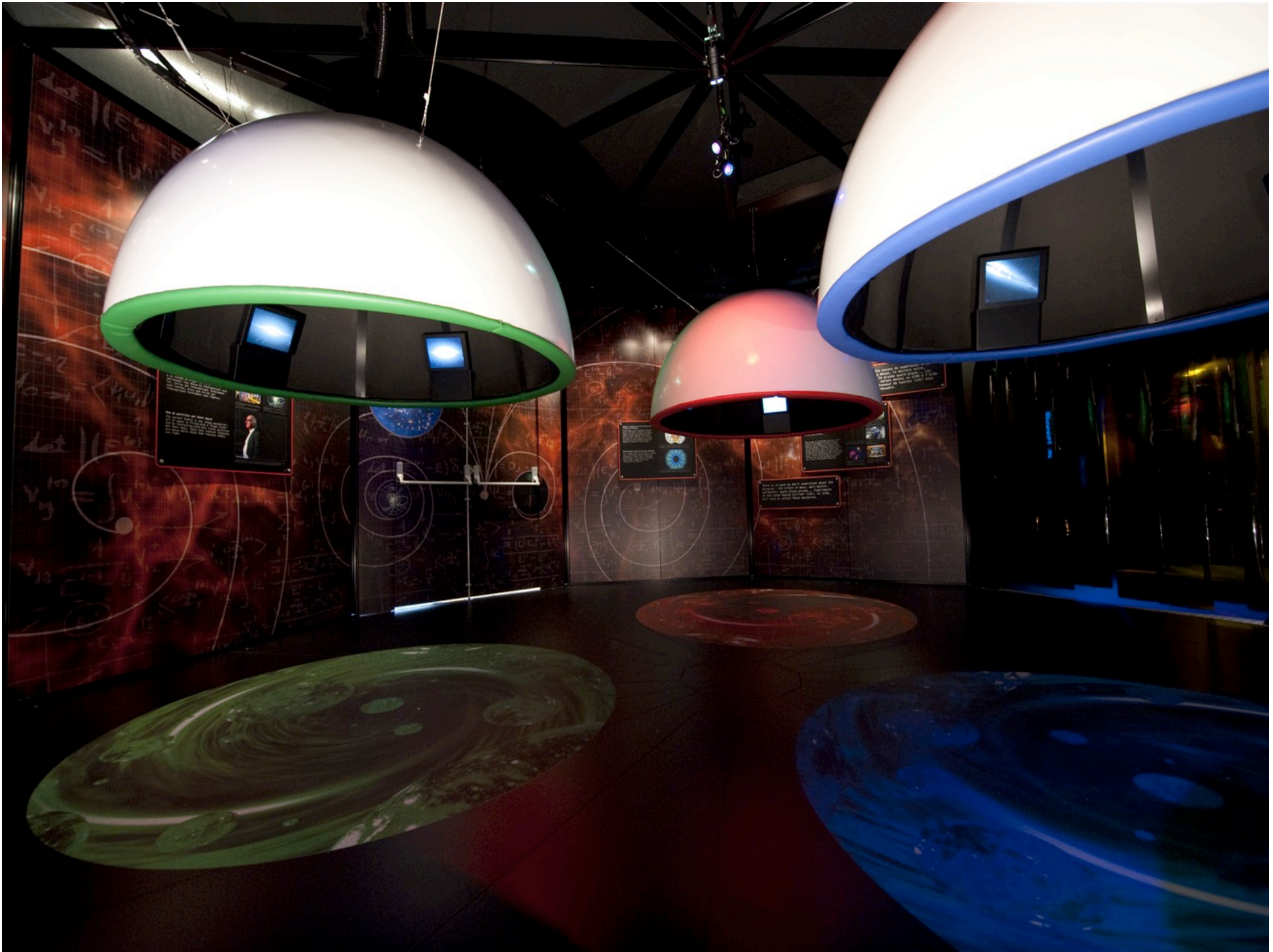
“All visible matter accounts for just 4% of the universe. So where’s the rest of it?”

- The visitor steps inside a dome to hear scientists talk about the mysteries and possible answers - where particles get their mass from (the Higgs field), dark matter, anti-matter and quark-gluon plasma.



FONDATION H. DUDLEY WRIGHT



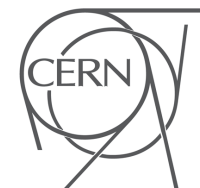


Zone 4: Exploring Matter

- This zone is dedicated to an explanation of the Large Hadron Collider (LHC). At the centre of the space is a three-dimensional model featuring a topographical map of the countryside above the LHC with a transparent side, enabling the visitor to look at what happens below ground.
- The visitor interacts with the model to see how particles can pass through layers of the detector during collisions. Screen animations capture the moment of actual ‘events’.



FONDATION H. DUDLEY WRIGHT



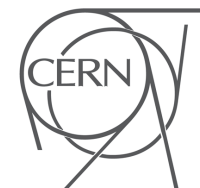


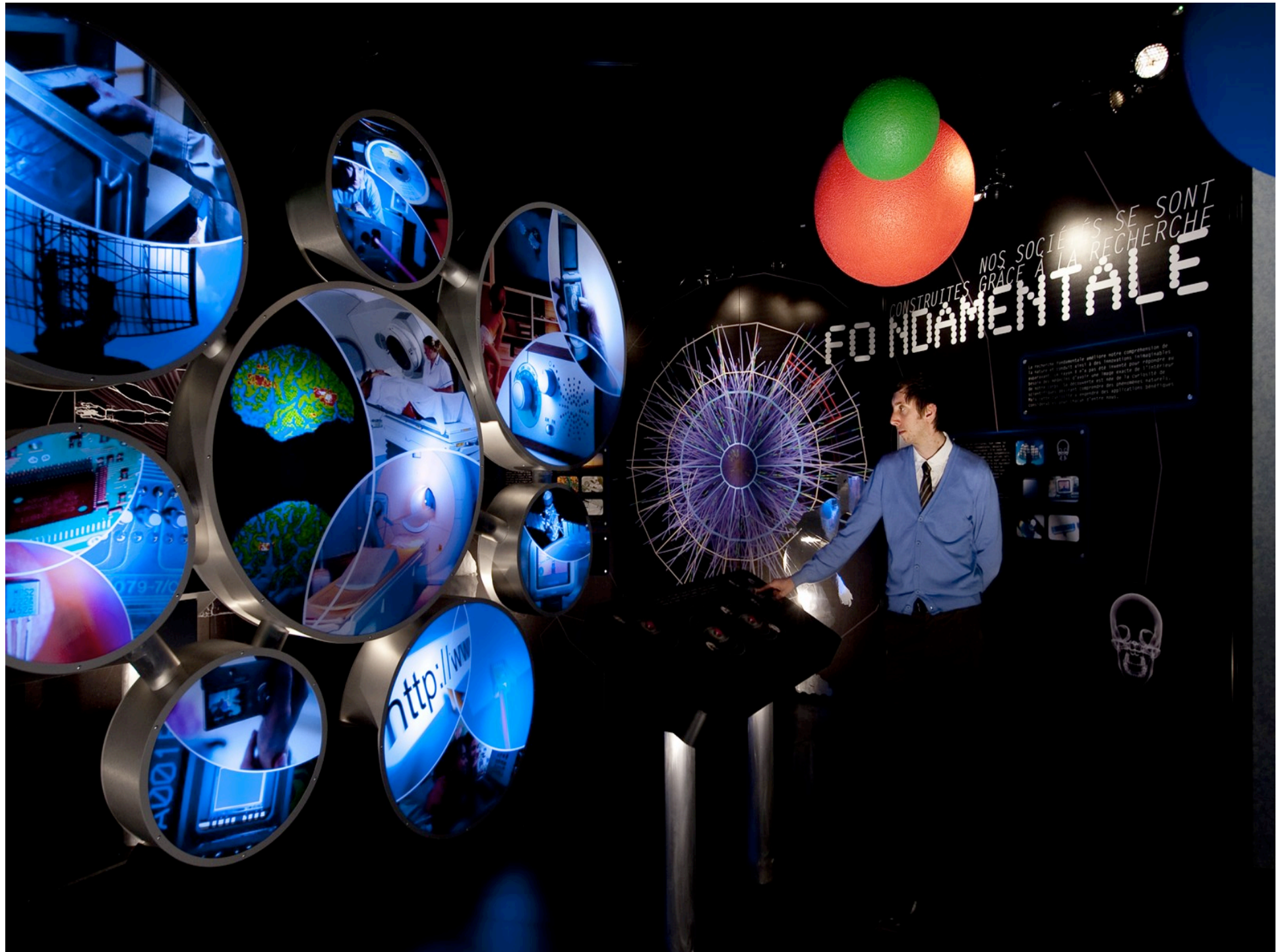
Zone 5: A world of fundamental research

- In the centre of the space two interactive light boxes form dramatic image grids, illustrating the amazing range of technologies that enrich our lives in every field – from television to radar to GPS to medical applications to the internet.



FONDATION H. DUDLEY WRIGHT





NOS SOCIÉTÉS SE SONT
CONSTRUITES GRÂCE À LA RECHERCHE
FONDAMENTALE

La recherche fondamentale développe notre compréhension de
la nature et conduit à des innovations technologiques
qui améliorent la qualité de vie et la santé de l'humanité.
Elle est le socle sur lequel se construit le progrès.
Elle est le moteur de la découverte et de la connaissance.
Elle est le fondement de notre civilisation.
Elle est le cœur de notre identité.

http://www



FOUNDERMENTALE

CONSTRUITES GRAV
RECHERCHE

La recherche fondamentale améliore notre compréhension de la nature et conduit ainsi à des innovations inimaginables auparavant. Le rayon X n'a pas été inventé pour répondre au besoin des médecins d'avoir une image exacte de l'intérieur de notre corps. Sa découverte est née de la curiosité de scientifiques désirant comprendre des phénomènes naturels. Mais cette curiosité a engendré des applications bénéfiques considérables pour chacun d'entre nous.

La physique des particules, tout comme les autres sciences fondamentales, vise à comprendre la nature à son niveau le plus élémentaire, comme au moment de son origine. Les découvertes de la physique des particules ont permis de découvrir que nous sommes constitués de matière et que la matière est constituée de particules élémentaires. Ces découvertes ont permis de comprendre la structure de la matière et de découvrir que la matière est constituée de particules élémentaires.

Fundamental research increases our understanding of nature, and brings with it unimagined innovations. The X-ray was invented because doctors wanted an accurate picture of what lies beneath our skin to understand natural phenomena. But the benefits of this curiosity to us all have been immense.



View of the outside walls of the exhibition