Please Allow Me to Introduce Myself

by Philip Emeagwali

[Transcript of remarks in Neutchatel, Switzerland, April 17, 2009]

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I was born in Nigeria and I have been living in the United States for the past 35 years. This is my first visit to Switzerland and it's a pleasure to visit the city of Bern where Albert Einstein made his discoveries.

Einstein and I were war refugees that fled to the United States. Ten years ago, the United Nations inducted both of us into its Gallery of Prominent Refugees. Einstein and I were refugee physicists who

improved upon the laws of motion first derived by Isaac Newton, 330 years ago.

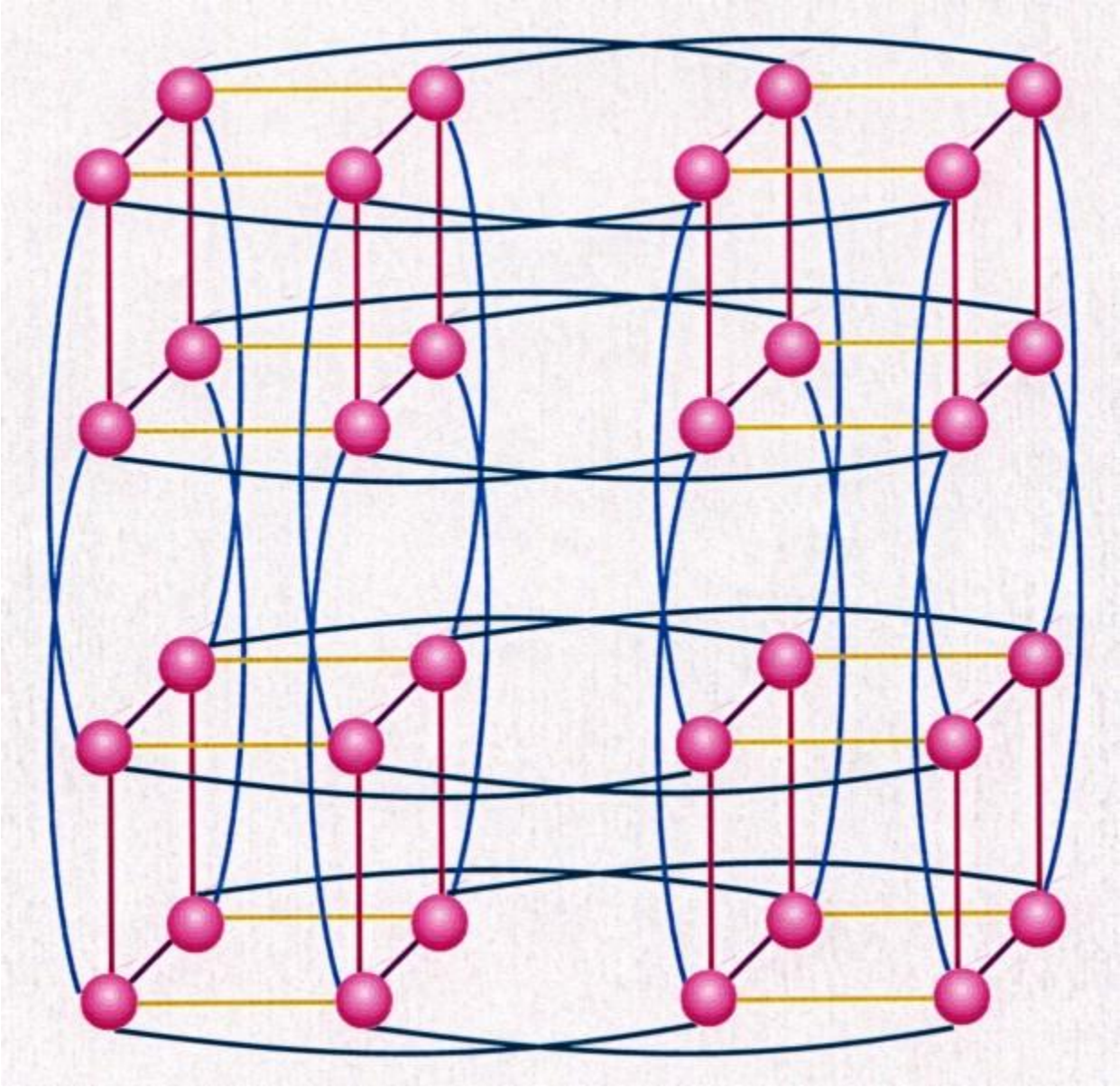

WELCOME
TO EINSTEIN'S
APARTMENT
WILLKOMMEN
IN EINSTEINS WOHNUNG

Albert Einstein adjusted Newton's storyline to make it accurate at **high** velocities. I adjusted Newton's storyline to make it accurate at **low** velocities for all that flows underneath the earth. I adjusted Newton's storyline to ensure that it holds at all times and places on the storyboard, blackboard and motherboard.

It was for accurately telling the story of Newton's Second Law of Motion that earned me a full page in the book called "History of the Internet."

People often ask me: "Why are you called one of fathers of the Internet?"

My answer is this: “In 1989, I programmed 65,536 processors or two-to-power-16 subcomputers to compute and communicate as one seamless 16-dimensional hypercube-as-an-internet unit—**receiving** and **sending emails** to 65,536 addresses, each a string of 16 zeroes and ones long—to solve 24 million equations each restating Newton’s Second Law of Motion at a speed of 3.1 billion calculations per second.



A 32-node, five-dimensional internet portion of the 65,536-subcomputers, 16-dimensional hypercube-as-an-internet programmed by Philip Emeagwali

Because it set three world records in 1989 it garnered international

headlines and I the mathematical story teller became the story.

The hypercube-as-an-internet was proposed in 1958 but I was the first to program it to solve a grand challenge defined as the 20 gold-ring problems in computing. That discovery, in part, inspired the reinvention of supercomputers as an internet. Today,
a supercomputer is a union of vast numbers of subcomputers communicating as an Internet.

For that discovery, I am profiled in books on the history of the Internet.

For 330 years, the second law of motion continuously evolved from

the truth that grew from a small and simple story into a grand challenge, at once grand and small, extraordinary and ordinary.

The oldest known mathematics textbook was excavated in Africa, 3,700 years ago. Since then mathematics was never an unchanging body of knowledge. It's an evolving story told by thousands of story tellers over the millennia. I contributed the story of the Second Law of Motion for all that flows underneath the Earth, and that contribution made me a part of the story of mathematics and I, the storyteller, became the story and the witness.

My journey from ignorance to the frontier of humanity's knowledge of the limits of computing
was a search for "the light."

One of my earliest memories—from 1964—was silently reciting a quotation on the masthead of the Nigerian newspaper called the *West African Pilot*.

It read: "Show the light and the people will find the way." I spent a long time pondering on the profound meaning of those wise words. Now I understand "the light" as a metaphor for knowledge and "showing the light" means increasing Africa's intellectual capital which will bring to fruition the continent's renaissance.

Philip Emeagwali has been called “a father of the Internet” by *CNN* and *TIME* , and extolled as “one of the great minds of the Information Age” by former U.S. President Bill Clinton . He won the 1989 Gordon Bell Prize, the Nobel prize of supercomputing.

Emeagwali with the National Counsellor of the Swiss Parliament

A minister from the Nigerian Embassy in Switzerland, Emeagwali, a Nigerian technologist.

With Nigerian Diaspora leaders Chief Ukiwo, Mr Remi Alao, Mr Lukmon