

# Nepal and CERN

how far we've come  
(and how much further we have to go)

*Abha Eli Phoboo*

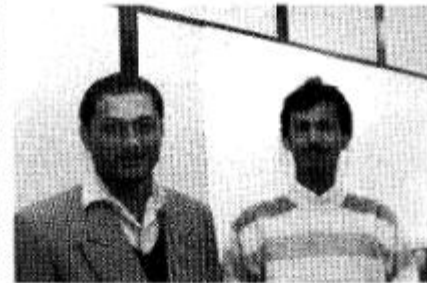
# 1994: this is where the story starts

Suresh Man Singh and Sureya Kumar Neupane, first Nepalis at CERN, under the World Laboratory scholarship programme

## Une première du Népal

Combien de nationalités différentes, penseriez-vous, sont représentées au CERN? Eh bien, il y a quelques semaines la réponse atteignait le nombre incroyable de 74 avec l'arrivée au Laboratoire des premiers scientifiques népalais. Suresh Man Singh et Sureya Kumar Neupane travailleront pendant un an sur le projet "détecteur de haute énergie" de démonstration de la faisabilité de certains éléments de détecteur pour le LHC. "Pour nous c'est comme un rêve de venir travailler au CERN" a déclaré Singh.

Ces deux physiciens sont au CERN dans le cadre d'un programme de bourse du Laboratoire mondial qui vise à permettre à des scientifiques du tiers monde de jouer un rôle dans l'élaboration des techniques de pointe pour la physique des hautes énergies. C'est grâce à Manfred Steuer, inspiré par une affiche annonçant l'école d'été de Katmandou en physique, que le Népal fait maintenant partie du programme. Jusqu'à présent, plus de 110 scientifiques de pays d'Asie, d'Afrique du Nord, d'Amérique du Sud et du Moyen-Orient ont participé soit comme boursiers, soit comme instructeurs au programme du laboratoire mondial au CERN.



*Suresh Man Singh (à gauche) et Sureya Kumar Neupane (à droite): les premiers scientifiques népalais à travailler au CERN*

## Nepal First

How many different nationalities would you say worked at CERN? Well, a few weeks ago, the number reached an incredible 74, when CERN's first Nepalese scientists arrived. Suresh Man Singh and Sureya Kumar Neupane will spend a year working on the High Energy Detector project, proving the feasibility of detector components for the LHC. "It is something like a dream for us to work at CERN," says Singh.

The two are here as part of the World Laboratory scholarship programme, which seeks to involve third world scientists in advanced technologies for high energy physics. It was thanks to Manfred Steuer, inspired by a poster advertising the Kathmandu Summer School in Physics, that Nepal has now been included in the programme. So far, more than 110 scientists from countries in Asia, north Africa, South America and the Middle East have participated either as fellows or as instructors at CERN as part of World Laboratory programmes.

5th ICTP / BCSPIN Kathmandu Summer School on Selected Topics in Field Theory, High-energy and Astroparticle Physics

22 May - 7 Jun 1994. Kathmandu, Nepal

# 2002: and meanders

## **SALE**

Sale of books, t-shirts, clothes from Nepal, ... in aid of humanitarian actions in the Philippines and Vietnam

**Friday 26 April 2002  
from 8 am to 6 pm in the hall of the main building.**

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# 2010: for a while

## A CERN FLAG IS SET TO WAVE UP IN THE HIMALAYAS

On 18 October, Hubert Reymond, from the Industrial Controls and Engineering group of the EN Department, will be leaving to Nepal with a CERN flag in his backpack. He will place it at the highest point of his trek across the Annapurna mountains in the Himalayas, Thorong La pass, at 5,416 m above sea level.

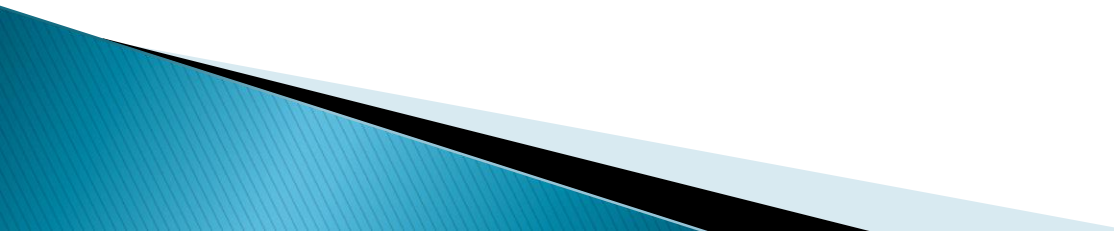


*A view of the Annapurna mountains  
(source: [www.flickr.com/minutesalone](http://www.flickr.com/minutesalone))*

“Is there any official CERN flag I can carry with me during my trek through Nepal?”

Some days ago, the Press Office was confronted with this unusual (but see box) question from Hubert Reymond. From 18 October to 10 November, Reymond, who works as an industrial computing engineer in the EN Department, will be trekking across the 55 km-long Annapurna massif in the Himalayas, whose highest point lies at 8,091 m (making it the 10th-highest summit in the world).

# In between years

- ▶ Nepalis conduct research at CERN or with data collected at CERN via member states and studying or working at institutions with formal relationships
  - ▶ CERN releases Invenio in 2011, an open software library management package that becomes the basis of HIMALDOC, a digital library platform maintained by ICIMOD in Nepal for knowledge exchange on sustainable mountain development
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# 2011

## A GIFT FOR THE HAPPY CHILDREN'S HOME ORPHANAGE

Profits from the ATLAS Resonance CD have been donated to the Happy Children's Home in Pokhara, Nepal. The orphanage was founded by Mette Stüwe, a former CERN staff member, and has received more than 14,000 CHF.



# 2013

- ▶ A student from Tribhuvan University attends the CERN Summer program. Ishan Pokhrel
- ▶ Pilot testing : The first International High Energy Particle Physics Masterclass in Nepal takes place in December at Kathmandu University.



# 2014

- ▶ Bishnu Lamsal, the first high school science teacher from Nepal attends the CERN High School Teachers Training program. Now he is inspiring the next generation of scientists.





# 2015

- ▶ Particle Physics Masterclass hosted by Kathmandu University and 16 schools in India, in partnership with KU, CERN and ICTP. Ended with a virtual visit where the students in India and Nepal could talk directly to experts at CERN's ATLAS Control Room.

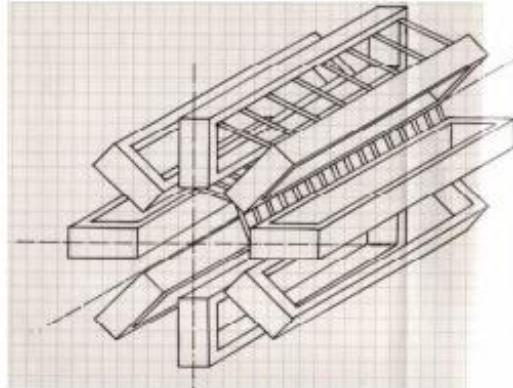


# Public screening of Particle Fever

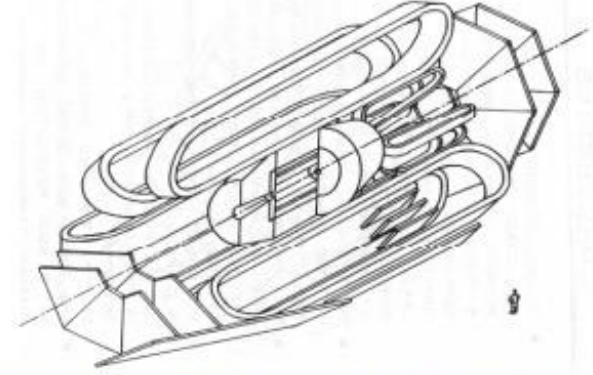
- ▶ followed by Q&A with CERN physicists. 200+ people attended with 200+ on the waiting list.
- ▶ Mark Levinson had a special message for the audience in Nepal



# Full circle



The first drawing of a toroidal magnet for LHC, which I did on 20 January 1991.



My first sketch of a LHC detector, which I proposed in a meeting at CERN on 18 February 1991.

It was a cold room in the cold winter of Nepal, but the room was full with young kids, young teachers, students, older professors, journalists, all overexcited, with so many who could not even make it inside. In Nepal, in the middle of winter, such a crowd. I could not believe my eyes. Then came the memories of my busy years during my youth at CERN. Then I realized what it was actually all about at CERN. Whatever the purpose, new physics or not new physics, Higgs or not Higgs, supersymmetry or not, the main miracle has happened. If the thrill could be felt so deeply so far away from the tunnels of CERN, there in the middle of the Himalayas where so many other burning problems are present, then there was the real message, the real spirit of CERN, the real purpose of CERN, achieved. The dream of the founders of CERN, incarnated and real, even more brilliantly than ever conceived..

That is the new physics of CERN, the real purpose of science as the dream of the Ancients for a united mankind. The founders of CERN who suffered so much during World War II would be proud.

# Education & Outreach sessions

- ▶ Students at Nawa Asha Griha in Kathmandu, Happy Children's Home in Pokhara
- ▶ With Bishnu Lamsal, organized an Outreach Session with 11 high schools in Syangja, ~200 km southwest of Kathmandu



# From CERN with love

## COLLECTION FOR NEPAL

**You are wonderful, thank you!**

On 25 April 2015, Nepal and neighboring countries suffered a violent earthquake, which killed thousands. On 28 April CERN Staff Association and CERN Management appealed to your generosity to help those affected, and opened an account to be able to receive your donations.

We are now pleased to announce that the amount raised is CHF 34'800, and was donated to the NGO Live to Love of His Holiness the Gyalwang Drukpa. We thank everyone who contributed to this important cause.

# Summer students



- Of the students from the Masterclass in 2014, Santosh Parajuli came to CERN as a summer student in 2015 and Yadav Kandel went to ICTP (and visited briefly for a CERN tour)

# Reaching out to schools



Kamlesh Chaudhary, science teacher and principal of Kamala High School, Sindhuli, came to CERN for the High School Teachers Training program in 2015.

# 2016

- ▶ Held an Outreach Session for 120 students and 30 teachers, staff and townsfolk
- ▶ Students were highly enthusiastic and asked brilliant questions. As always, lots of fun interacting with the students and teachers





# Back to basics

- ▶ Particle physics Masterclass in Tribhuvan University, in partnership with CERN, KU and ICTP
- ▶ Impact 300+ students in Kathmandu and Sindhuli
- ▶ Summer student, Mahesh Thakuri, attends the CERN Summer Student program.



# Nepalis at CERN

Work as engineers, technicians, communication professional, and physicists, via CERN member states and institutions with professional relationships



# In-between



(clockwise) Minister of Health Visits CERN with the Ambassador in Geneva. Visitors from the Mission in Geneva. Ministry of Science organizes a virtual visit to ATLAS on National Science Day.

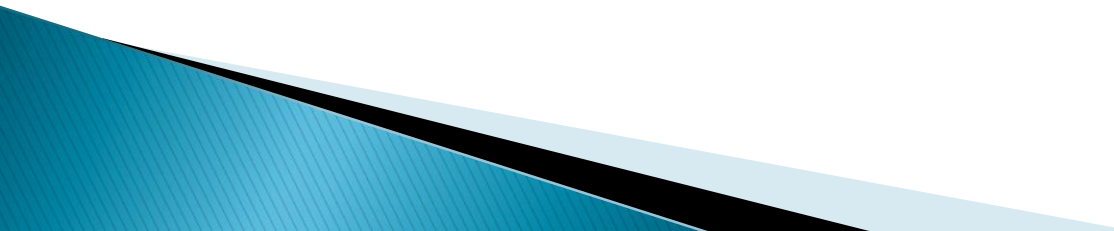


# 2017

- ▶ Genuine interest from the government, with the president visiting CERN just last week
- ▶ International Cooperation Agreement between CERN and Nepal unanimously agreed upon by the CERN Council, to be signed later this year



# and here we are

- ▶ at the first SAHEPI
  - ▶ More than 70 people registered to attend! (We had planned for 35)
  - ▶ Want to understand the expertise and need in South Asia, to connect and make potential future collaboration possible
  - ▶ Become an active partner in scientific pursuits, especially in the region, and facilitate the establishment of a dedicated scientific facility
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▶ Thank you!