#### **Marc Virchaux Prize 2010**

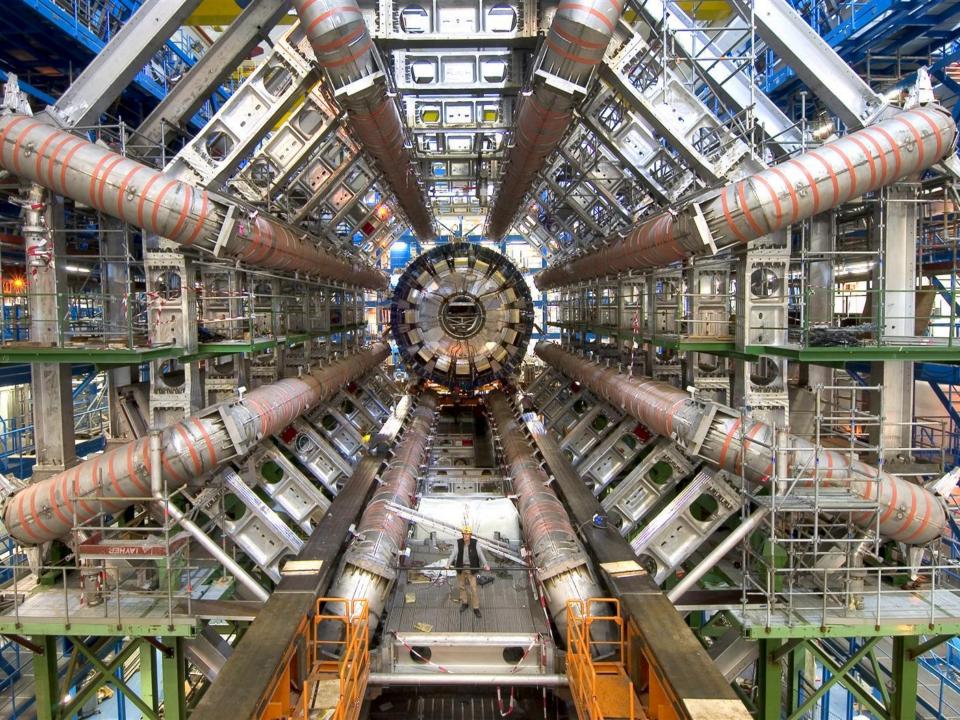


Marc Virchaux 1953 – 2004



## **The Marc Virchaux Prize**

- In memory and recognition of the fundamental contributions of Marc Virchaux (Saclay) to the design of the ATLAS experiment, in particular to the design of the muon spectrometer, the ATLAS Muon Collaboration has established the Marc Virchaux Prize to reward the best PhD theses concerned with the design and construction of, and the analysis of data from, the ATLAS muon spectrometer.
- The prize is awarded annually
- The prize consists of a diploma and a sum of money of CHF 2'000





- Jean Ernwein
- Jean-François Laporte
- Ludovico Pontecorvo (Project Leader, ex officio)
- Frank Taylor (IB Chair, ex officio)
- Rüdiger Voss (Chair)



# **Previous prize winners**

2005: Martin Aleksa and Mario Deile

2006: Giulio Aielli and Stephanie Zimmermann

2007: Daniela Rebuzzi and Martin Woudstra

2008: David Primor and Matthias Schott

2009: Konstantinos Bachas and Michele Bianco



### The 2010 winners are...

#### Konstantinos Nikolopoulos

(National and Kapodistrian University of Athens, now at Brookhaven National Laboratory), for his thesis "Discovery Potential for the Standard Model Higgs → ZZ(\*) → 4I and Contributions to Muon Detection in ATLAS" (2010, supervisor: Dimitrios Fassouliotis)

Konstantinos' thesis covers in substantial depth and detail important aspects of the installation, test, commissioning and operation of the CSCs, including a wide range of contributions to the simulation, readout, and track reconstruction. He also made a wide range of contributions to the R&D on Micromega detectors for a high-luminosity upgrade of the muon spectrometer. In a second part, the thesis presents a comprehensive and rigorous study of the discovery potential for the Standard Model Higgs decay  $H \rightarrow ZZ(*) \rightarrow 4$  leptons.



#### Niels van Eldik

(University of Amsterdam, now at University of Massachusetts) for his thesis

"The ATLAS muon spectrometer: calibration and pattern recognition" (2007, supervisor: Frank Linde)

Niels's thesis documents a wide range of important work on the MDT simulation and reconstruction software, including drift tube calibration, pattern recognition, and tracking. He has made key contributions to the development of the Muon Event Data Model and of the Calibration Event Data Model, developing significant parts of the muon spectrometer software now in use for the processing and analysis of LHC data.