

# KARYOTAKIS Yannis

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- Date of birth: September 30<sup>th</sup>, 1954, Athens, Greece
- Nationality: French and Hellenic
- Married September 24<sup>th</sup>, 1988
- Two children born 1989 and 1991

## PRESENT POSITION

I am staff researcher since 1981 for the French national research center (CNRS). Today I am Directeur de Recherche Classe Exceptionnelle. My present research activities are focused on neutrino physics and detector R&Ds.

## EDUCATION

- Undergraduate physics studies for 4 year to obtain the Maîtrise de physique. Université de Paris XI, Orsay 1973-1978.
- Diplôme d'Études Approfondies (DEA) : Physique nucléaire et physique des particules, Orsay 1979.
- Thèse de troisième cycle LAL, Orsay 1981 with J.Lefrançois. This is the first short, two years, thesis necessary at that time to continue in research.
  - Etude des événements dimuons de basse masse ( $1.8\text{GeV}/c^2 \leq M \leq 2.6\text{GeV}/c^2$ ) produits dans les interactions pion nucléon et proton ou antiproton nucléon. (Study of the low mass dimuon events, ( $1.8\text{GeV}/c^2 \leq M \leq 2.6\text{GeV}/c^2$ ) produced by a pion or a proton beam on a fixed target).
- Thèse d'Etat Ecole Polytechnique, Orsay 1985 with J.Badier. This is the real PhD thesis, obtained four years after the Thèse de troisième cycle, a total of 6 years.
  - Etude des photons directs produits lors des interactions hadroniques (Direct photon production in hadronic interactions).

## Scientific Carrier

- The 1st of October 1981, I got a tenure track position to CNRS (Centre National pour la Recherche Scientifique) as a researcher (Attaché de Recherche) and was attached to the laboratory of Ecole Polytechnique de Paris.
- October 1986, I left Ecole Polytechnique for the LAPP (Laboratoire de Physique de Particules d'Annecy le Vieux (LAPP)).
- Paid Research associate at CERN from October 1989 to October 1990.
- CERN staff from January 1991 to December 1994. On leave from CNRS.
- DR2 October 1996 (Directeur de recherche 2<sup>ème</sup> classe).

- Scientific responsible for all IN2P3 laboratories participating to the BaBar experiment at SLAC from September 1997 to July 2000).
- On leave from CNRS for Stanford Linear Accelerator Center and BaBar technical coordinator from October 2000 to October 2002. Responsible to run the experiment and take data. BaBar is an experiment looking for CP violation, of ~600 physicists and 72 institutions in 12 countries.
- Joliot-Curie prize from the french physics society (July 2001).
- DR1 October 2005 (Directeur de recherche 1ère classe).
- Director of the Laboratoire d'Annecy-le-Vieux de Physique des particules (150 staff and 40 non permanent) (2007-2015).
- DRCE1 October 2011 (Directeur de recherche classe exceptionnelle)
- The project ENIGMASS, I proposed for an excellence laboratory was accepted by the French government, ranked 1st and financed with 7 million Euros for 8 years.
- Visiting professor at CERN (2015-2016)
- Scientific Delegated for the french evaluation agency HCERES (sept 2016- )
- DRCE2 October 2016 (Directeur de recherche classe exceptionnelle the highest rank at CNRS)

#### RECENT COMMITTEES

- Member of the LHC committee at CERN (July 2000-2004).
- President of the NIKHEF (Nationaal instituut voor subatomaire fysica) Scientific Advisory Committee, Holland (2007 - 2012).
- Member of the Restricted European Committee for future Accelerators (2007-2012 ).
- Member of the scientific council of the Italian National Laboratory de Frascati near Rome (2012- )
- President of the ARISTEIA (Call for projects of Excellence) panel for physics and astronomy in Greece (2012-2013).
- Member of the scientific council of the IRFU at Saclay laboratory (2013-)
- Member of the Upgrade Cost Committee at CERN (2013- 2017)

#### DISTINCTIONS

- Joliot-Curie prize from the French Physics Society (July 2001) for my contribution to the discovery of CP violation by the B mesons

#### Experiments and responsibilities

- NA3 (1979 - 1985)
  - Study of dilepton events produced by hadronic interactions, Drell Yan model, K factor. Chamber maintenance and running, on-line software and trigger.
  - Direct photon studies. Gluon structure function. Author for the off-line simulation, and analysis. On-line software, construction, test and maintenance of a shower localization chamber, trigger.
- ALEPH (1985 - 1986)
  - Off-line simulation and reconstruction of the electromagnetic calorimeter.

- L3 (1986 - 1996)
  - Calibration of the BGO electromagnetic calorimeter with electron beams. Responsible of the software and the beam line.
  - Coordinator for the on-line and off-line software of the BGO, calorimeter.
  - Electroweak precision measurements  $e^+e^- \rightarrow e^+e^-\gamma$ .
  - Convener for the new particle search group of L3. Search for SUSY particles.
  - Responsible for the construction, installation, integration, of a new electromagnetic calorimeter in L3, the EGAP, improving hermeticity.
- BaBar (1994 - 2004)
  - R&D for a Cherenkov aerogel detector. Group leader for the LAPP group.
  - System manager of the forward PID for BaBar.
  - Convener for the BaBar Physics Book. Measurement of the  $\beta$  angle.
  - Responsible for the construction of a CsI calorimeter for measuring the PEP-II background.
  - Member of the steering committee of the BaBar drift chamber.
  - Responsible for the construction, installation and running of the gas system for the central detector.
  - Responsible for all IN2P3 groups participating to BaBar. About 32 physicists.
  - First BaBar run coordinator (May-September 1999) 1.3 fb<sup>-1</sup> collected by the experiment.
  - First measurement of CP violation with the B mesons ( July 2001)
  - PID convener from October 99 to September 2000.
  - BaBar technical coordinator from October 2000 to October 2002.
- Linear Collider accelerator and detector R&D (2004 - )
  - Nanometer stabilisation of the focusing quadrupoles for ILC and CLIC. Thesis of B.Bolzon.
  - Work Package coordinator for the European project EUROTeV).
  - Electronics for the Beam position monitors for CTF3.
  - Detector R&D for a hadronic calorimeter for ILC and CLIC based on MicroMegas chambers.
  - Design and optimisation for the SiD concept, validated in 2009.
  - Member of the SiD concept management.
- Neutrino Physics WA105 at CERN and DUNE at Fermilab
  - Study of the low energy hadron beam H2-VLE at CERN SPS for WA105
  - Studies on the insulation volume of the WA105 cryostat

### Teaching

Teaching is not mandatory for a researcher in France; however I was invited to give few lectures from time to time.

- 1994 DEA « Méthodes physiques expérimentales » université de Grenoble. Lectures: Analysis methods in particle physics.
- 1998 Troisième cycle de la physique en Suisse Romande EPFL (Switzerland). Lectures: Particle physics detectors.

