



## ACRONYMS AND MORE

### **ATLAS**

A Toroidal LHC Apparatus, one of five particle detector experiments under construction at the LHC at CERN in Geneva, Switzerland

### **BESSY**

Berliner Elektronenspeicherring-Gesellschaft für Synchrotron Strahlung m. b. h. (Berlin electron storage ring company for synchrotron radiation), a research institution for science and industry in Berlin, Germany

### **CEBAF**

Continuous Electron Beam Accelerator Facility, an accelerator facility at Jefferson Lab in Newport News, Virginia

### **CERN**

Organisation Européenne pour la Recherche Nucléaire (European Organization for Nuclear Research), the world's largest particle physics laboratory west of Geneva, on the border between France and Switzerland

### **CESR**

Cornell Electron Storage Ring

### **CHES**

Cornell High Energy Synchrotron Source, a national research center at Cornell

### **CLASSE**

Cornell Laboratory for Accelerator-based Sciences and Education, the merger of LEPP and CHES

### **CLEO**

Short for Cleopatra, Cornell's particle detector; During his years as a graduate student at Cornell from 1971 to 1978, Christopher T. Day, Ph.D.'78, physics, suggested the name

CLEO for Cornell's new particle detector, paired with CESR (Cornell Electron Storage Ring), after Caesar and Cleopatra.

### **CMS**

Compact Muon Solenoid, an experiment at LHC

### **CP violation**

Charge parity; a theoretical phenomenon related to the Big Bang

### **CW**

Continuous wave

### **DESY**

Deutsches Elektronen-Synchrotron (German Electron Synchrotron), a publicly funded national research center with locations in Hamburg and Zeuthen, Germany

### **DIAMOND**

Diamond light source, a new scientific facility under construction in South Oxfordshire, England, on the Harwell Chilton science campus

### **ERL**

Energy Recovery Linac, Cornell's new linear accelerator currently in the prototype stage

### **Fermilab**

Fermi National Accelerator Laboratory, a Department of Energy laboratory located in Batavia, Illinois

### **G-line**

The last line to be added after lines A-F at CHES

### **ILC**

International Linear Collider, a next-generation accelerator

### **IP**

Interaction point

### **KEK-B**

High Energy Accelerator Research Organization, an accelerator used in the Belle experiment to study CP violation, located in Tsukuba, Ibaraki Prefecture, Japan

### **LEPP**

Laboratory of Elementary-Particle Physics, a national research center at Cornell

### **LHC**

Large Hadron Collider, a next-generation accelerator under construction in Geneva, Switzerland

### **MacCHESS**

Macromolecular Facility at CHES; Former Cornell faculty member Keith Moffat, a Scotsman, coined the term MacCHESS as "son of CHES," short for Macromolecular Facility at CHES.

### **SIMS**

Secondary ion mass spectrometry

### **SPring-8**

An 8-GeV, third-generation x-ray synchrotron source in Harima Science Garden City, Hyogo, Japan

### **SR**

Synchrotron radiation

### **SRF**

Superconducting radio frequency