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

CHESS
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 CHESS

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 CHESS

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

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