Invented at the turn of the 20th century, particle accelerators developed as the workhorses of nuclear and particle physics to become the largest scientific instruments ever built by man. Today, they exist in many forms and constitute essential tools for the study of condensed matter and biomolecules. Although little known to the general public, they also have numerous applications which impact our daily lives: in medical diagnostics and treatment, the polymer and electronic component industries, public security and food and health product safety.

**PREPARING THE DESIGNERS, BUILDERS AND OPERATORS OF TOMORROW’S PARTICLE ACCELERATORS**

**JUAS** offers Master, PhD students and young professionals two intensive 5-week courses delivered by a faculty comprising some 50 experts from academia, research facilities and industries active in the field. Course 1 addresses the science of particle accelerators, whereas course 2 covers technology and applications.

The curriculum is overseen by an international Advisory Board which includes **JUAS**’s 16 participating universities. Both courses are concluded by exams so that the latter may attribute ECTS and/or doctoral credits to their participating students.

**SCHOOL DIRECTOR**
Dr. Philippe Lebrun (CERN Ret.)

**LOCATION - ON SITE COORDINATION**
European Scientific Institute
Greater Geneva (Archamps, France)
ECTS and doctoral credits awarded by participating universities
Minimum B2 English level
Limited number of participants

**NEXT SESSION**
Course 1: 13 Jan – 14 Feb 2020
Course 2: 17 Feb – 19 Mar 2020

**ON-LINE APPLICATIONS**
Course 1: 2 Sep – 27 Oct 2019
Course 2: 2 Sep – 24 Nov 2019
www.juas.eu

**CONTACT**
juas@esi-archamps.eu

**MORE THAN 45 000 PARTICLE ACCELERATORS WORLDWIDE**

**JUAS** proposes an innovative pedagogical approach, with a unique mix of lectures, tutorials, seminars, group workshops, practical sessions and laboratory visits, including CERN, ESRF Grenoble, Paul Scherrer Institut, Geneva University Hospital and Bergoz Instrumentation.
Our students regularly come from more than 20 countries, exemplifying the international reputation and attractiveness of JUAS

PHILIPPE LEBRUN, JUAS DIRECTOR

The courses really helped me with the realization of my Master project and motivated me to continue my career in accelerator physics

Nuria, University of Valencia/CERN

An invaluable opportunity to have top-level professionals as lecturers.

Vittorio, University of Rome La Sapienza

The visits were awesome opportunities to meet experts in their place of work

Antoine, Université Paris-Sud

I made many valuable friendships with interesting and open-minded people from all over the world.

Maciej, University of Wrocław

The best course I ever attended in my life

Dinesh, Manipal University