

JFIC - JACoW Fake International Conference



Monday, December 13, 2021 - Thursday, December 16, 2021

Zoom

Scientific Program

The programme will consist of invited and contributed oral presentations as well as poster presentations in the Track Groups and Tracks listed below.

MC1 Circular and Linear Colliders

Classification 1 is devoted to accelerators (synchrotrons, linacs, ERLs, etc.) providing colliding beams (hadrons and/or leptons) for particle physics experiments. It includes facilities colliding beams from different types of accelerators, such as linac-ring colliders. Among the subjects for this classification are operating experience and performance limitations, upgrade plans, accelerator physics and technology issues specific to colliders and the design and R&D for future projects.

MC1.1 Sub-class. 1 in MC1 Circular and Linear Colliders

MC1.2 A second sub-classification for MC1

MC1.3 A third sub-classification for MC1

MC2 Photon Sources and Electron Accelerators

This is Track Group MC2 Classification 2 covers photon sources (synchrotron light sources, ERLs, FELs, laser systems, other free-electron sources such as THz sources, Compton sources, etc) and electron accelerators (linear, circular, recirculating, etc.). It includes insertion devices such as planar and helical field undulators. Associated accelerator systems, such as injectors, booster synchrotrons, photon beam lines and photon beam line components can also be proposed for this Session. Papers presented can be project descriptions or cover individual aspects of photon sources and electron accelerators. Both theoretical and experimental results are solicited.

MC2.1 A first Track in MC2 Photon Sources and Electron Accelerators

MC2.2 A second Track in MC2

MC3 Muon Accelerators and Neutrino Facilities

Classification 3 is devoted to (i) novel and unconventional sources of particles, including electrons and protons, neutrons, ions, and secondary particles and antiparticles; and (ii) new concepts of accelerating techniques which may overcome the present limitations of size and/or cost or which give access to very new beam characteristics.

MC3.1 A first Track in MC3 Muon Accelerators and Neutrino Facilities

MC3.2 A second Track in MC3

MC4 Hadron Accelerators

Classification 4 is devoted to designing, developing, upgrading, constructing and commissioning low-, medium- and high-energy hadron accelerators, excluding hadron colliders. The session includes ion sources, electrostatic accelerators, proton and ion linear accelerators, proton and ion synchrotrons, radioactive beam facilities, antiproton accumulators and collectors, ion accumulator and storage rings, cyclotrons, synchrocyclotrons, FFAGs and any other similar machines. Both low- and high-intensity machines are covered, as are all relevant aspects of high-intensity fixed-target accelerators such as proton drivers for spallation neutron sources, neutrino factories, etc.

MC4.1 A first Track in MC4 Hadron Accelerators

MC4.2 A second Track in Track Group MC4

MC5 Beam Dynamics and EM Fields

Classification 5 includes reviews and progress reports on general aspects of electro-magnetic interaction of charged particle beams in accelerators and storage rings. It covers linear and non-linear beam optics, modeling of externally applied or beam-generated electro-magnetic fields, as well as theory, observations and simulations of single-particle dynamics and collective effects, both coherent and incoherent. The emphasis is on deepening the understanding of fundamental processes or limitations governing beam dynamics and uncovering possible new mechanisms relevant to accelerator design and performance, independent of technological or project-specific aspects.

MC5.1 A first Track in MC5 Track Group Beam Dynamics and EM Fields

MC5.2 A second Track in Track Group MC5

MC6 Beam Instrumentation, Controls, Feedback and Operational Aspects

Classification 6 is devoted to measurement and control of the beam properties in particle accelerators including beam diagnostics and instrumentation, beam feedback systems, low-level rf controls, timing and synchronization schemes and laser-based instrumentation. Included also are contributions on accelerator control systems, online modeling and applications control software, as well as operational aspects of modern accelerators such as alignment and surveying methods, machine protection systems

MC6.1 First Track in MC6 Track Group Beam Instrumentation, Controls, Feedback and Operational Aspects

MC6.2 Second Track in Track Group MC6

MC7 Accelerator Technology Main Systems

Classification 7 is devoted to contributions on the design, construction, testing and performance of accelerator components or subsystems, with emphasis on technological aspects and methods. Special attention is due to technological developments that allow to improve accelerators from the point of view of performance, size or cost effectiveness. Contributions with a strong beam performance aspect should generally be classified elsewhere.

MC7.1 First Track in MC7 Track Group Accelerator Technology Main Systems

MC7.2 Second Track in Track Group MC7

MC7.3 Third Track in Track Group MC7

MC8 Applications of Accelerators, Technology Transfer and Industrial Relations

Classification 8 includes contributions with emphasis on the broad applications of accelerators, aspects of technology transfer and laboratory-industry relationships rather than on the specific accelerator technologies themselves.

MC8.1 First Track in MC8 Track Group Applications of Accelerators, Technology Transfer and Industrial Relations

MC8.2 Second Track in MC8 Track Group