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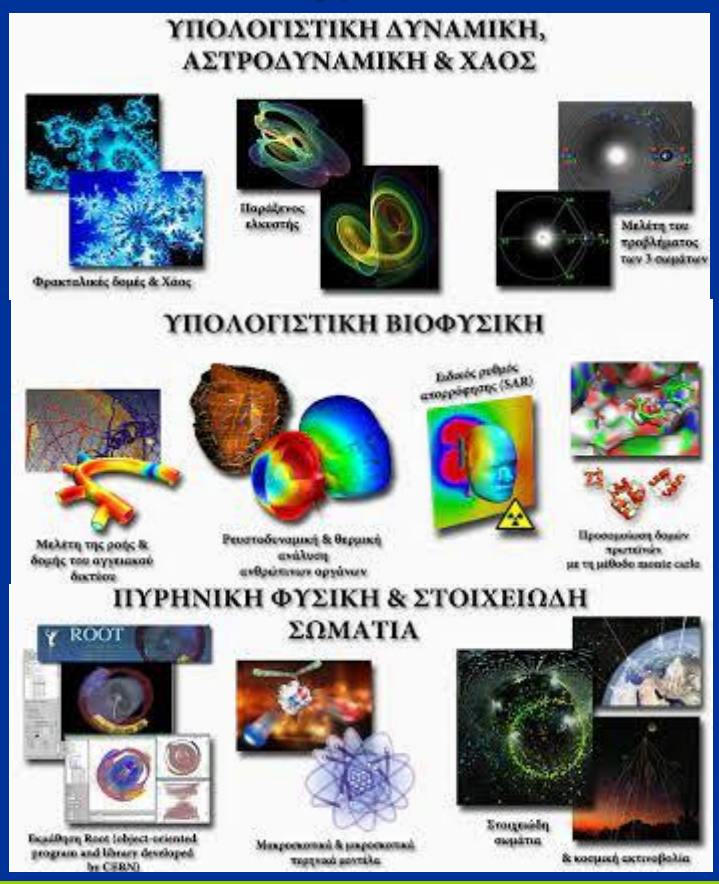
ΣΕΜΙΝΑΡΙΟ
ΠΜΣ ΥΠΟΛΟΓΙΣΤΙΚΗΣ ΦΥΣΙΚΗΣ
ΤΜΗΜΑ ΦΥΣΙΚΗΣ

Τρίτη 10 Μαΐου 2022

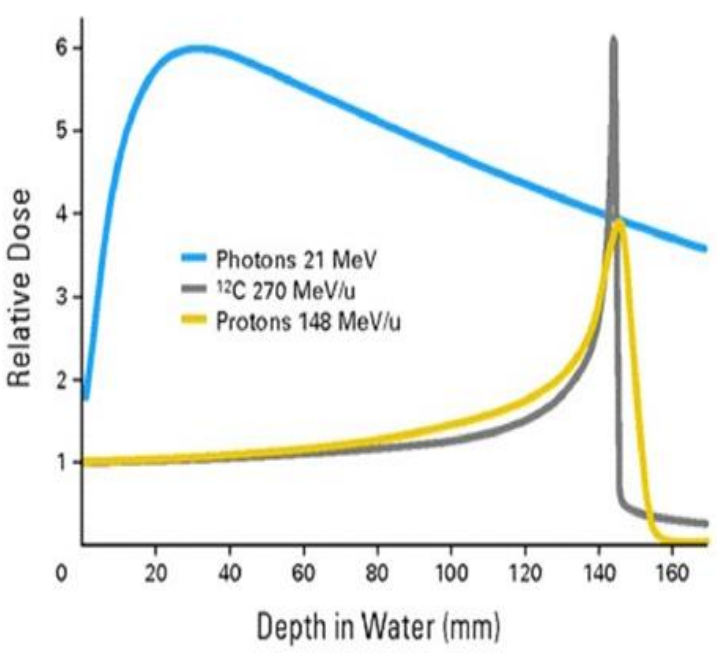
ώρα 12:00

Zoom link: https://authgr.zoom.us/j/93408351002

Σεμινάρια ΠΜΣ Υπολογιστικής Φυσικής 2021-2022



From Physics to Clinics



Dr. Panagiota Foka
CERN

While the mandate of particle physics research institutes is fundamental research, the developed technologies find applications for the benefit of society. In particular, the development of accelerators, that is the heart of such research centres, has boosted cancer tumour therapy. The last few years the South East European Institute for Sustainable Technologies, SEEIIST, is pursuing the realisation of a next generation "Facility for Tumour Hadron Therapy and Biomedical Research" in the SEE region. To maximise benefits it is planned as a regionally distributed facility with hubs in different countries offering numerous opportunities for technology transfer and benefits to SEE industry as well as international cooperation opportunities. This multidisciplinary project is expected to strengthen scientific expertise in the SEE region, stimulate the development of complementary technologies and to trigger spin-offs. Thanks to the first financial support of the European Commission (DG RTD) and the EU funded HITRIplus project, state-of-the-art particle accelerator design and related technology are developed in collaboration with the main European research centres such as CERN and GSI-FAIR. In order to stimulate related capacity building in the SEE region, in support of such projects, a broad spectrum of activities is being developed to address diverse communities spanning from high-school students to professionals. Such activities and upcoming opportunities will be outlined in this presentation.

Το προφίλ του ομιλητή

Panagiota Foka is a senior researcher working at the European Laboratory for Particle Physics, CERN, Switzerland, delegated by her home institute, GSI, the Heavy Ion Research Centre at Darmstadt, Germany, where she holds a permanent position since 2000. PhD in physics, received in 1994, at the University of Geneva (first measurements of enhanced production of strange particles confirming theory predictions for energetic heavy-ion collisions). Her career, including a postdoctoral position at the University of Geneva and a Marie Curie fellowship in Frankfurt, was mostly developed within the ALICE experiment at the CERN LHC, studying the properties of matter created in energetic particle collisions, where she also served in management positions such as deputy physics coordinator, outreach coordinator, system coordinator for data quality monitoring and event display, responsible for large collaboration documents (technical, physics performance reports). Also, she is a member of the ALICE TPC detector and offline groups. Long list of publications in major peer-reviewed physics journals spanning from experiments articles and reports as co-author of ALICE, WA98, NA49, NA35 heavy-ion experiments to a few authors reviews; and editor of several volumes of conference proceedings. The last few years involved in medical applications and the development of a next generation ion facility for tumour cancer therapy research with ions. Active in the dissemination of information on scientific advances via the organization of conferences and seminars, and via educational outreach activities (member of the steering committee of the international particle physics masterclasses and outreach group since 2000; development and overall coordination of the new particle therapy masterclass since 2019); conscious of the need to enhance awareness of benefits to society from fundamental research.