

Shkodra2014

**International Workshop on LHC, Astrophysics, Medical and
Environmental Physics**

Shkodra (Albania), 6-8 October 2014

Workshop web pages: <http://indico.cern.ch/e/Shkodra2014>

The workshop will take place in the Natural Sciences Faculty University of Shkodra "Luigj Gurakuqi" Shkodra, Albania on the shore of the Shkodra Lake, from 6-8 October. It is jointly organized by the Albanian Shkodra and Tirana Universities, by CERN, the French and Italian HEP community (CNRS-IN2P3, CEA-IRFU, INFN-Bari), French and Italian Embassy in Albania, the Albanian Astrophysics community and the Balkan Environmental Association (BENA). Town of Shkodra as well participate in the organization.

This workshop will come just after the important time LHC communities discover the Higgs boson. The programme widely open includes sessions on HEP physics (theory and experimental results) and Astrophysics. As all surrounding countries are indebted into Medical Physics and Environment research, we decided to have extended sessions on Modern techniques for cancer treatment and also give place to Environment Physics particularly developed in Albania.

The programme will include theory and experimental results sessions on

- **HEP** :
 - CERN programme in accelerator development, Atlas and CMS LHC's detectors, Standard Model, Higgs physics, Heavy Ions, LHC Experiment and the LHC Machine Status before Run 2 starts early 2015 with its foreseen developments.

- **Astrophysics** :

- The astrophysics sessions aim to treat different up to date problems of Astrophysics. What about the experimental cosmology data? What we know, what we think we know and what we don't know about the physics of gamma-ray bursts? How significant are the new data on galaxy evolution? What about the supermassive black hole at the Galactic center? How advanced are our theories on black holes? What are the results of the gravitational microlensing method in detecting extrasolar planets?

- ***Medical Physics*** :

- The Medical Physics program will primarily focus on the ultrasound techniques and their use in the hospital. A general introduction to the main Medical imaging techniques will be given. The theoretical bases of ultrasound and their practical achievements (equipment, methods) in imaging but also in therapy will be examined. The "Doppler mode" will be presented in medical applications with emphasis on results. The program will conclude with a review of imaging practical use in the hospital.

Past experience has shown that participants enjoy a practical implication from them. This is why it will be reserved for voluntary participants a minimum time to enable them to present quickly (maximum 15 minutes) the object of their usual work or other subject related to Medical Physics on which they have agreed to work during the conference.

A draft programme is available on the conference web pages.

Format

The Workshop will consist of plenary sessions starting on Monday, 6 October at 8:30 am, with oral presentations by invitation only. The conclusion session will take place on Wednesday, 8 October 2014.

In addition, a poster session during the **Welcome reception** time, will be held on Monday late afternoon, 6 October after the presentations are over.

For the Poster session, we require that the authors send to us

(ludwik.dobrzynski@cern.ch) an abstract as soon as possible. The response will be issued few Days after.

Location of the Symposium

Postal address (during the meeting):

Natural Sciences Faculty
University of Shkodra "Luigj Gurakuqi"
Shkodra, Albania

E-mail: ludwik.dobrzynski@cern.ch

Web site : <http://indico.cern.ch/e/Shkodra2014>

Venue

Shkodra, a 2500 years old city, has traditionally been the principal center of Albanian culture. Lying by the side of the lake, at the foot of Rozafa castle, and surrounded by the Buna, Drini and Kiri rivers, nested between the Shkodra lake and mountains, Shkodra exhibits a rare natural beauty. A rich historic heritage provide interest to the city. There are footstep from old civilization combine with new modern one.

Nested between the Shkodra lake and mountains, Shkodra benefits from a truly exceptional natural environment that has made it since Roman time an open city.

Registration and Conference Fee

We would like to run without registration fees except for the workshop diner on Tuesday Evening for which a reasonable participation will be asked.

For the students, it's foreseen to sponsor part of their participation.

Accommodation

The accommodation will be in local hotels surrounding the workshop place. A list of hotels will be given soon on the WEB site. Their indicative prices run between 15 to 30€ per night. Students hotel will also be reserved. We plan to cover partly students accommodation on their own request.

Hotel Guarantee

Hotel Cancellation Policy

Visas

The participants are warned that they may require a visa to enter to Albania. Visa applications may take some time. Please contact

Transportation and traveling

By road

People who travel to Shkodra by car from Montenegro, Croatia, Bosnia and Herzegovina, and Serbia can reach city coming from Montenegro Border in Hani Hotit or Muriqan. People traveling from Macedonia or other countries can reach Shkodra by national roads after passing border in East Albania.

By air

International Tirana Airport is at 90 km from Shkodra

A Bus is foreseen to run from Tirana Airport to Shkodra on Sunday 5 October late afternoon (1h30 track duration) and on Thursday Morning back to Tirana airport.

Social Events

A welcome reception will be held on Monday evening, 6 October 2014. All accompanying persons are invited to attend the reception.

A conference dinner will also be held 7 October Evening. Please confirm the participation of accompanying persons when you register and provide with your participation.

Computing

Excursions

The organizers plan to have a Town tour excursion in the Afternoon of Tuesday 7 October to which all participants are invited.

Contributions to the Symposium

Contributions to the Workshop will be either talks or posters. Sessions will be plenary or parallel for some specific one with oral presentations by invitation only for plenary talks. The average allocated time for each talk is expected to be 30 minutes. For most of the sessions, whenever appropriate, one or two talks will be included in the programme, which should provide a theoretical overview of the field and insights to the most recent developments.

Contributors are expected to provide an electronic version of their presentation in a portable format (PDF files). More details will be indicated on the Workshop Web site.

Summary of Deadlines