29TH SEPTEMBER TO 4TH OCTOBER 2013



LA VILLA CLYTHIA, FRÉJUS (CÔTE D'AZUR), FRANCE





Dr. Paolo Giuseppe ALBA

Realistic QCD Equation of State Università degli studi di Torino, Italy





Carlota ANDRES CASAS

The suppression of particles produced at high transverse momentum is one of the main tools to characterize the medium properties in the experiments of high-energy nuclear collisions. We study the physics underlying this suppression, in terms of medium-induced gluon radiation, in eikonal approximation using the known case of a single-inclusive medium induced gluon radiation. 1st year of PhD.

Universidade de Santiago de Compostela, Spain





Dr. Guillaume BATIGNE

Quark Gluon Plasma study with ALICE

Permanent staff

SUBATECH, France





Meriem BENALI

Nucleon structure by Virtual Compton scattering at low and high energy. 1st year of PhD.

LPC Clermont-Ferrand, France





Adrien **BESSE**

My research interests are related to perturbative QCD, hadron structure and color dipole interactions topics. I'm using these techniques to study the helicity amplitudes of the diffractive production of vector meson in the small x regime. **3rd year of PhD**. CEA IRFU / SPHN, France





Felix BOEHMER

Detector development, Strangeness production in nuclear matter 3rd year of PhD.

TUM, Germany





Marie BOER

I'm working on measurement of the cross sections of deeply virtual Compton scattering and exclusive piO lepto-production on protons, in the context of generalized parton distribution studies. 2nd year of PhD. IPN Orsay, France





Dr. Maryna BORYSOVA

My recent research study is focused on the analysis whether multiform initial tubular structures, undergoing the subsequent hydrodynamic evolution and gradual decoupling, can form the soft ridges. Motivated by the flux-tube scenarios, the initial conditions are modelled by the sets of different number of high energy density tube-like fluctuations in a boost-invariant 2D transverse geometry. The influence of a fluctuating bumpy initial structures in the most central A+A events on the collective evolution of matter, resulting spectra, angular particle correlations and v_n -coefficients is studied in the framework of the HydroKinetic Model (HKM).

6 years after PhD.

Kiev Institute for Nuclear Research, Ukraine





Prof. Peter BRAUN-MUNZINGER

Heavy Ion Physics: Hard Probes

Speaker

GSI, Germany





Prof. Jaume CARBONELL

Introduction to Lattice QCD: applications to nuclear and hadronic physics Speaker

IPN Orsay, France





Prof. Brigitte CHEYNIS ALICE CR1 CNRS IPN Lyon, France





Loup CORREA

The research project is the determination of the generalised polarisabilities of the proton via the electroproduction of a photon (ep -> ep?) with the The Mainz Microtron MAMI. 1st year of PhD.

LPC Clermont-Ferrand, France



Quiela CURIEL



For my PhD I am performing the study of data taken in 2006 and 2012 in the COMPASS experiment at CERN. The main goal of my thesis is the determination of fragmentation functions (FF) of guarks into pions and kaons. These are basic universal quantities which are used in the description of several particle physics reactions, in particular "semi-inclusive" deep inelastic scattering of muons on protons, where a hadron, pion or kaon for example, is detected in the final state. To achieve this, it is neccessary to determine the mean number of hadrons (known as hadron multiplicity) produced in this reaction as a function of several kinematical variables. I already extracted the raw pion and kaon multiplicities from the 2006 data. The next step would be to evaluate, via a simulation, the global acceptance and efficiency of the apparatus in order to correct the data for the limited geometry of the apparatus and its imperfections. The goal is to measure the multiplicities with an accuracy of ~5%. It means that the response of the spectrometer must be known with a better accuracy than that. One important element of the spectrometer for this physics channel is the the Ring Imaging Cherenkov detector (RICH) which is used for the pion and kaon identification. Since the RICH is very difficult to describe in a simulation, its response will be parameterized from physics data. I performed the production of tables describing the RICH response by a quantification of the efficiency as well as the misidentification of particles, as a function of relevant kinematical variables.

2nd year of PhD. CEA IRFU / SPHN, France





Maxime DEFURNE

I work on hadronic physics, more specifically on DVCS and DVMP. Then extraction of Compton Form Factor and GPD. 1st year of PhD. CEA IRFU / SPHN, France Chess





Katarzyna DEJA

My interests focus on physics of the quark-gluon plasma. QGP produced at the early stage of relativistic heavy-ion collisions is unstable due to anisotropic parton's momentum distribution. We try to develop a formalism to compute energy loss of a fast parton traversing the unstable plasma. **3rd year of PhD**.

National Centre for Nuclear Research, Poland





Camille DESNAULT

Measurement of the Deeply Virtual Compton Scattering cross-section off the neutron in Jefferson Lab in Virginia (USA).

1st year of PhD.

IPN Orsay, France





Prof. Yuri DOKSHITZER

Hadron interactions, colour and QCD partons
Speaker

LPTHE, France





Sverre DORHEIM

Strangness Production in Pion-Induced Reactions at FOPI TUM, Germany





Bertrand DUCLOUE

QCD perturbative a haute energie 1st year of PhD. LPT Orsay, France





Zuzana FECKOVA

The aim of the project is to develop a hydrodynamic simulation of heavy-ion collisions and use it to study observables for such collisions. We intend to include fluctuations of initial conditions due to deformation of nuclei and quantum fluctuation effects. 1st year of PhD. University of P. J. Safarik, Slovakia





Brice GARILLON

Cross section measurement of the f0 and f2 meson electroproduction with CLAS detector : The cross sections of the channels ep->epf0->eppi+pi- and ep->epf2->eppi+pi- have never been measured so far and may shed light on the nature of these particles. In high virtuality regime, some conjectured states allow to interpret the nucleon structure with Generalized Partons Distributions (GPDs) formalism. The GPDs correlates longitudinal momentum fraction of the parton with their transverse position in the recoil nucleon, which brings information regarding the quark's angular momentum contribution to the spin of the nucleon. To obtain the cross section, I am analysing data from e1-6 experiment done with CLAS detector at the Jefferson Laboratory.

1st year of PhD.

IPN Orsay, France





Dr. Andrey GRABOVSKIY

"Current: Radiative corrections to odderon Green function within CGC. PhD: Moebius form of the BFKL kernel in NLO." **2.5 I defended my thesis on 24.12.2010** Budker INP, Russia





Maxime GUILBAUD

My research topic is based on PbPb collisions performed at LHC in ALICE and mainly divide in two part. The first one deals with soft physics. I mean here primary charged particle density as a function of pseudo-rapidity. The second is based on the vector mesons. This topic is related to strangeness (via phi mesons) and medium effect studies (via rho mesons) which reflect the chiral symmetry restoration. **3rd year of PhD**.

IPN Lyon, France





Doga Can GULHAN

My current project is jet-track correlation measurements using CMS detector in heavy ion collisions. The aim is to investigate how jets are modified after passing through the medium and in return how do they modify the medium. My research extends to J/Psi-jet correlations in search for Cherenkov mesons. 2nd year of PhD.

Massachusetts Inst. of Technology (USA) Switzerland





Luke HANRATTY

Studying the pT spectra of Lambda and KOShort particles in heacy ion collisions with ALICE at the LHC. Comparing this pT spectra to that produced in proton-proton collisions, and also studying the ratio of Lambda to KOShort production in order to analyse the 'baryon anomoly'.

3rd year of PhD.

University of Birmingham, UK





Mohammad HATTAWY

Deeply Virtual Compton Scattering off 4He: The study of the hadron structure is an important field of research for the understanding of our complicated Nature. The Generalized Parton distributions (GPDs) are the observables needed in order to have an access to the 3D distribution of the guarks and gluons inside a hadron. For this reason, the GPDs have been investigated on both theoretical and experimental sides in the last two decades. The study of the 4He nuclei within this framework is interesting because of it's spin zero, which reduces to one the number of GPDs required to represent its partonic structure. In order to extract the real and the imaginary parts of it's GPD (HA), the Deep virtual Compton Scattering (DVCS) (e- 4He ? e- 4He ?) reaction is observed. This DVCS reaction is obtained with an electron beam energy of 6 GeV at Jefferson Laboratory (Virginia, USA). To ensure the exclusivity of the coherent DVCS, the low energy recoiled 4He nuclei have to be detected. For this purpose, a new detector called Radial Time Projection Chamber (RTPC) has been installed in addition to the current setup of the Hall-B.

1st year of PhD.

IPN Orsay, France





Cristiane JAHNKE

"Theoretical models for the QGP based on holographic techniques" Universidade de Sao Paulo, Brazil





Roland KATZ

From a theoretical point of view, I investigate the quarkonia suppression as a probe to Quark-Gluon Plasma production in heavy ion collisions. More precisely, I study from different approaches the dynamics of a heavy quark/anti-quark pair in an isotropic QGP assuming color deconfinement and thermalization processes. 1st year of PhD. SUBATECH, France Astronomy





Grigor KHACHATRYAN

Coherent photproduction of Rho(770) and Omega(782) vector mesons on deuterium using data from CLAS in JLAB Junior scientific researcher. Yerevan Physics Institute, Armenia





Prof. Elias KHAN Permanent staff.

IPN Orsay, France





Gwendolyn Lacroix

Computing equations of state of Yang-Mills plasma and QGP thanks to phenomenological approaches. **3rd year of PhD**. UMONS, Belgium





Caio LAGANA

I'm studying Lambda- and Sigma-hypernuclei production at the ALICE detector.

1st year of PhD.

Universidade de Sao Paulo, Brazil

Classic music - Trekking





Sylvain LEBLOND

Structure of 18,19B and 21C,22C

2nd year of PhD.

LPC Caen, France





Graham LEE

Study of rho resonance in 7 TeV p-p events at ALICE. 2nd year of PhD. University of Birmingham, UK





Massimiliano MARCHISONE

I'm studying the Upsilon production in Pb-Pb collisions at forward rapidity in the ALICE experiment. Goal of this analysis is the determination of the nuclear modification factor, which compares the yield in nucleus-nucleus collisions with that in pp.

3rd year of PhD.

Univ. Blaise Pascal/LPC Clermont-Ferrand, France





Javier MARTIN BLANCO

Quark Gluon Plasma study within ALICE

experiment

1st year of PhD. SUBATECH, France





Prof. Mac MESTAYER

Particle Detectors: Operating Principles and Calibration Issues

Speaker

Jefferson Laboratory, USA





Cédric MEZRAG

Phenomenological and theoretical work on Generalized Parton Distributions.

1st year of PhD.

CEA IRFU / SPHN, France

Jazz - Cinema - Karate





Alexis MOSCOSO RIAL

I am working in analytical calculations concerning the radiative energy loss of particles traversing a dense, hot and coloured medium.

1st year of PhD.

Universidade de Santiago de Compostela, Spain

Heavy metal





Dr. Hervé MOUTARDE

Nucleon reverse engineering: Structuring the nucleon with quarks and gluons

Speaker CEA IRFU / SPHN,France





Dr. Carlos MUNOZ CAMACHO

Nucleon reverse engineering: Structuring the nucleon with quarks and gluons 7 years after PhD (permanent staff) IPN Orsay, France





Jean-Yves OLLITRAULT

Phenomenology of ultrarelativistic heavy-ion collisions **24 years after PhD.** CEA Saclay, France





Dr. Rafayel PAREMUZYAN

I am working on Geant4 simulation for the Deeply Virtual Compton Scattering (DVCS) experiments completed/planned in Hall A at Jefferson lab. I am also working on analysis of CLAS (at Hall B in Jefferson Lab) data for the Timelike Compton Scattering (TCS) process, which was a subject of my PHD. Post-Doc 2.5 years after PhD.

IPN Orsay, France





Annika PASSFELD

PiO spectra in pPb collisions via the Photon Conversion Method (PCM) with the ALICE detector

3rd year of PhD.

WWU Münster, Germany





Katarzyna PONIATOWSKA

On my M.Sc (Diploma) thesis I have studied the correlations of non-identical particles pion-kaon (femtoscopy) in STAR for the BES (Beam Energy Scan) program. On my Ph.D. study, I would like to continue this topic. I would like to consider all energies from BES program. When my work will finish, I will get information about space-time asymmetry in the emission of analyzed particles in the heavy ion collisions. Furthermore, when I will make the study for all energies from BES program, I will be able to explain if (and how) the space-time asymmetry is related to the energy of the collision.

1st year of PhD.

Warsaw University of Technology, Poland Book fantasy and SF - Music rock - Swimming





Dr. Sarah PORTEBOEUF- HOUSSAIS Quark-Gluon Plasma Physics Lecturer, Université Blaise Pascal, Clermont-Ferrand LPC Clermont-Ferrand, France Running





Dr. Sébastien PROCUREUR

Instrumentation and analysis in hadronic physics Permanent staff (7 years after PhD). CEA Saclay, France





Ekaterina RETINSKAYA

We study the system formed in heavy-ion collisions, which behaves like a very small lump of fluid. We model the expansion of this lump of fluid using relativistic viscous hydrodynamics, and using various models for the initial state. We apply this modelization to recent experimental data from LHC and RHIC. We investigate how well these data can be described by hydrodynamics. 2nd year of PhD. (started October 2011) IPhT CEA, France





Prof. Alain RIAZUELO

Seeing relativity : A virtual journey around (and within) a black hole.

Speaker

IAP, France





Manoel RODRIGUEZ- MOLDES DIAZ

LHC experimental results indicate that jet modification in nuclear collisions is a major probe to characterize the created medium. To fully profit from the LHC nuclear programme a consistent theoretical description is needed. Because of this, the effects of QCD-mediuminduced gluon radiation in differents setups will be studied.

1st year of PhD.

Universidade de Santiago de Compostela, Spain





Lucile RONFLETTE

High pt physics in Alice. Measurement of isolated photons. Master 2 student in PhD next year.

SUBATECH, France





Violetta SAGUN

On the basis of exactly solvable statistical models I develop a rigorous treatment of the analogs of phases and phase transitions (PT) in finite systems [1]. A new formulation of the statistical multifragmentation model (SMM) of atomic nuclei based on the analysis of the virial expansion up to the second virial coefficients of the nuclear fragments of all sizes is suggested. The developed model not only enables us to partly account for many-body effects in a simple way, but also it allows us to reveal the source of the surface tension and curvature term of the fragment free energy. Also the found saddle like form of the fragment size distribution gives us the explicit counterexamples to the widely spread beliefs about an exclusive role of bimodality as the first order PT signal in infinite and finite systems [2]. Note that a rigorous treatment of the analogs of phases and phase transitions in finite systems is of great interest for a heavy ion phenomenology because of the experimental searches for a deconfinement PT from hadronic matter to guark gluon plasma. I believe that similar exact solutions of a phenomenological model of guark gluon bags with surface tension [3, 4] can help us to work out the unambiguous signals of a finite volume analog of a deconfinement PT and a finite volume analog of its (tri)critical point. [1] K. A. Bugaev, A. I. Ivanytskyi, V. V. Sagun and D. R. Oliinychenko, Is bimodality a sufficient condition for a first order phase transition existence?, accepted for publication in Phys. Part. Nucl. Lett. (2013). [2] V. V. Sagun, A. I. Ivanytskyi, D. R. Oliinychenko, K. A. Bugaev, Can bimodality exist without phase transition? Proceedings of XI International Scientific Conference of Students and YoungScientists "Shevchenkivska Vesna 2013", held in Kiev, March 18-23, 2013, 4 p. (arXive:1304.5997 [nucl-th] 22 Apr 2013). [3] K. A. Bugaev, Quark Gluon Bags with Surface Tension, Phys. Rev. C 76, (2007) 014903. [4] K. A. Bugaev, V. K. Petrov and G. M. Zinovjev, Fresh look at the Hagedorn mass spectrum as seen in the experiments, Europhys. Lett. 85, (2009) 22002.

2nd year of PhD / Bogolyubov Institute for Theoretical Physics, Ukraine









Xitzel SANCHEZ CASTRO

Bulk- and jet-production of KOs and Lambda in PbPb collisions at #sqrt{s_{NN}}=2.76 TeV in ALICE IPHC, France Swimming - Reading classical novels





Prof. Claude SEMAY

Quasiparticle approaches for quark-gluon plasma Permanent staff

UMONS, Belgium





Dr. Alexandre SHABETAI

Hard probes(charm and now jets) in heavy ion collisionsEvent Generator Physics **Permanent Staff (chercheur CNRS)** SUBATECH, France





Prof. Peter SKANDS

Event Generator Physics

Speaker

CERN, Switzerland





Prof. Raimond SNELLINGS

Heavy Ion Physcis: Bulk propertiesof the Quark-Gluon Plasma

Speaker

Utrecht University, Netherlands





Rishat SULTANOV

Jet physics in ALICE experiment. Studying for fragmentation functions, hadronic structure of jets in proton- proton and heavy- ion collision and the event multiplicity. Research is dedicated to searching the influence of QGP on jet properties. **3rd year of PhD**.

ITEP, Russia

Command Sport game - Diving





Pieter TAELS

I am part of a small theoretical particle physics group, under supervision of Dr. Igor Cherednikov. Our group is part of the bigger experimental particle physics group of the University of Antwerp- under supervison of Prof. Dr. Van Mechelen- that participates in the CMS experiment at CERN. In our subgroup, we study phenomena related to the strong interaction, within the framework of QCD. In particular, we focus on the theoritical aspects of Wilson lines, as well as their phenomenological applications. For my PhD I am working on the latter, and currently I am investigating how Wilson lines can be of use in the soft-collinear effective theory description of the quark gluon plasma. In the long run, we would like to apply our thechiques to the description or transversal momentum dependent parton distribution functions.

1st year of PhD.

University of Antwerp, Belgium

Guitar-Hiking





Dr. Dawid TOTON

'We are studying gluon distribution funtions and looking for saturation effects. Less than a year after PhD. Polish Academy of Sciences, Poland





Dr. Antonio URAS
ALICE
3rd year after PhD.
IPN Lyon, France





Jan WAGNER

Heavy flavor electron analysis in p-Pb collisions with the ALICE detector at the LHC GSI, Germany Hiking-Martial arts





Mengliang WANG

Jet structure in high energy physics, QGP signal 1st year of PhD. SUBATECH, France





Michael WINN

Analysis of j/psi at midrapidity in p-Pb colliions with ALICE at sqrt (s_{NN})=5.02 TeV 1st year of PhD. Physikalisches Institut, Germany Canoe slalom





Alice ZIMMERMANN

The ALICE experiment at LHC measures the Quark-Gluon plasma in heavy ion collisions.

In the plasma quarks and gluons are deconfined. The measurement of hard scattered partons of the colliding nuclei in particle jets allows to study parton energy-loss in the medium and constrains possible energy loss scenarios. By analysing strange particles, like KOs, Lambda and Antilambda particles inside of jet cones one can analyse fragmentation into strange particles at low energies and the baryon-meson ratio in jets. For these particles in jets one expects sufficient yields in a transverse momentum range (from 0.3 to 10 GeV/c) with moderate combinatorial background. "

The start of my PhD was in February 2011.

Physikalisches Institut, Germany Horseback riding - Musics like guitar, piano - Oil ans aquarell painting drawing





Céline GAUBERT-ROSIER

Secretary

IPN Orsay, France

Floral art - Ballroom dance





Sabrina LECERF

Secretary

GANIL, France

Swimming





Renaud BOUSSARIE

1st year of PhD.

LPT Orsay, France