

Journées de Rencontre des Jeunes Chercheurs 2018

Sunday 14 October 2018 - Saturday 20 October 2018

VVF Villages Lège-Cap-Ferret



**Société Française
de Physique**

Book of Abstracts

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Introduction

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25 min présentation + 5 min questions

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Monte Carlo track structure simulation for radiation microdosimetry and targeted alpha therapy

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Introduction to Flavour Physics

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Etude des désintégrations radiatives B->hh gamma avec l'expérience LHCb

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Tests of Lepton Flavour Universality in semitauonic decays of b-hadrons at the LHCb experiment

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Introduction

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Recherche d'un second boson de Higgs de basse masse ($m < 110\text{GeV}$) se désintégrant en deux photons avec l'expérience CMS

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Search for flavor-changing neutral currents in top quark decays $t \rightarrow Hc$ and $t \rightarrow Hu$ in multilepton final states in proton-proton collisions at $\sqrt{s} = 13\text{ TeV}$ with the ATLAS detector

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Search for a new resonance decaying into two photons with the ATLAS detector at LHC

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A High-Granularity Timing Detector for the Phase-II upgrade of the ATLAS Detector system

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Studies on Gas Mixture and Gas Recirculation Effects on GEM Detectors Operation at the CERN GIF++ Facility

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Introduction à Curci-Ferrari : Résultats et questions ouvertes

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Cold nuclear matter effects in Drell-Yan process and charmonium production

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Optimisation des performances de SuperNEMO et R&D pour le projet LiquidO

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Gamma-Ray Burst detection at very high energy

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Étude des sources gamma HESS J1640.6-4633 et HESS J1641.0-4619 : source d'accélération de rayons cosmiques de hautes énergies

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Beyond Standard Model / 88

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Recherche d'un second boson de Higgs de basse masse ($m < 110\text{GeV}$) se désintégrant en deux photons avec l'expérience CMS

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Beyond Standard Model / 91

Search for flavor-changing neutral currents in top quark decays $t \rightarrow Hc$ and $t \rightarrow Hu$ in multilepton final states in proton-proton collisions at $\sqrt{s}=13$ TeV with the ATLAS detector

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Flavor-changing neutral currents are not present in the Standard Model at tree level and are suppressed in loop processes by the unitarity of the Cabibbo-Kobayashi-Maskawa matrix; the corresponding rates for top quark decay processes are experimentally unobservable. Extensions of the Standard Model can generate new flavor-changing neutral current processes, leading to signals which, if observed, would be unambiguous evidence of new interactions. A data set corresponding to an integrated luminosity of 36.1 fb^{-1} of pp collisions at a center-of-mass energy of $\sqrt{s}=13$ TeV recorded with the ATLAS detector at the Large Hadron Collider is used to search for top quarks decaying to up or charm quarks with the emission of a Higgs boson, with subsequent Higgs boson decay to final states with at least one electron or muon. No signal is observed and limits on the branching fractions $B(t \rightarrow Hc) < 0.16\%$ and $B(t \rightarrow Hu) < 0.19\%$ at 95% confidence level are obtained (with expected limits of 0.15% in both cases).

Beyond Standard Model / 92

Search for a new resonance decaying into two photons with the ATLAS detector at LHC

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A search for low-mass diphoton resonances is performed using 80 fb^{-1} of pp collision data collected with the ATLAS detector at the Large Hadron Collider. Pairs of isolated photon candidates with high transverse momentum are selected, probing the diphoton invariant mass spectrum in the range 65 to 110 GeV. No significant excess with respect to the Standard Model expectation is found, and a limit at the 95% confidence level is set on narrow resonance fiducial cross-section times branching ratio ranging from 30 to 101 fb.

Standard Model / 93

Observation of the Higgs boson in associated production with two top quarks and decaying into tau leptons with the CMS experiment (CANCELED)

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Observables de spin des leptons taus dans l'expérience CMS auprès du LHC (25'+5')

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Hartree-Fock approach with realistic nuclear interactions from chiral effective field theory in a symmetry breaking scheme

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Characterization of the FALSTAFF spectrometer first arm: Study of ^{252}Cf and ^{235}U fission fragments

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Le bassin d'Arcachon, une lagune origine, dynamique et fragile

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