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Chargé de recherche
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Position and education

- 2017- : Chargé de recherche (researcher) at the IPNL, CMS experiment : measurement of the top quark to Higg boson coupling, and upgrade of the CMS tracker for HL-LHC.
- 2014 - 2017 : Chargé de recherche at the IPHC Strasbourg, same topics.
- 2011 - 2014 : Post-doc at ETH Zürich (Switzerland) in the CMS experiment, based at CERN: photons and searches for the Higgs boson in the $H \rightarrow \gamma\gamma$ final state.
- 2007 - 2010 : PhD Thesis in Particle Physics at University Claude-Bernard (Lyon) : “Observation of direct photons in first data and preparation to the Higgs boson searches in CMS experiment at LHC (CERN)”.

Responsibilities

Institutionnal and scientific responsibilities

- 2018- : Scientific coordinator at the IPNL for the Upgrade project of CMS Tracker Endcap at the HL-LHC
- 2016 - 2017 : Alternate member of the Laboratory Council of IPHC
- 2016 - 2017 : Scientific coordinator at the IPHC for the Upgrade project of CMS Tracker at the HL-LHC
- 2013 - 2014 : Co-convener of the analysis group on Standard Model Diboson in CMS
- 2012 - 2013 : Co-responsible of the Monte-Carlo simulation for the CMS Higgs boson group

Review Committee, thesis jury

- Member of a thesis jury (2017, Zagreb University, Croatia)
- Since 2011 : Member of analysis review committees of CMS for 11 published/public analyses.

Organisation of schools, workshops and conferences

- National : Member of the organisation committee of School Of Statistics (2017-) and Journées de Rencontres Jeunes Chercheurs (2015-)
- International : Member of the organisation committee of Standard Model at LHC conference (Madrid, 2014), Higgs+jets workshop (Durham, 2014), and the workshop Photon Physics and Simulation at Hadron Colliders (Paris, 2012, 2015)

Presentations in international conferences

Moriond QCD (La Thuile, 2017), Precision theory for precise measurements at LHC and future colliders (Viet-Nam, 2016), Physics in Collision (UK, 2015), Multi-Boson Interactions (Brookhaven, 2014), Higgs Couplings (Torino, 2014), PASCOS (Taiwan, 2013), La Thuile (2013), HEP-EPS (Grenoble, 2011), Higgs Hunting (Orsay, 2010)

Supervision

- 2016- : Co-supervision of a PhD student at the IPHC
- 2016, 2017 : Supervision of a chinese PhD student from Peking University at the IPHC, two times three months, funded by the CNRS-IN2P3 LIA France-China (FCPPL)
- Depuis 2015: Supervision of a 3rd year bachelor student, two Master 1 students, and one Master 2 students at the IPHC and IPNL
- 2011-2014 : Co-supervision of a PhD student at ETH Zürich. Supervision of several students.

Teaching

- 2015 - 2017 : Lectures in programming, 2nd year of Master at the IPHC
- 2012 : Lectures in multivariate methods, Wolfgang Pauli Lectures (ETH)
- 2007 - 2014 : Teaching (64h) per year in Physics, Mathematics at the University Lyon 1, and in Physics at ETH Zürich.

Scientific communication

- 2015 - 2018 : Participation to the LHC Master Class program for high school students
- 2013 - 2016 : Scientific advisor for the danse show "Quantum" from Gilles Jobin choreographer, in residency at CERN in 2013. Public discussions after the show.
- 2007 - 2010 : Participation in several exhibitions on CMS and the LHC

Languages

French (native). English (read, spoken, written).

Selection of publications

- CMS Collaboration. Measurement of the associated production of a single top quark and a Z boson in pp collisions at $\sqrt{s} = 13$ TeV. Phys.Lett. B779 (2018) 358-384.
- CMS Collaboration. Measurement of differential cross sections for Higgs boson production in the diphoton decay channel in pp collisions at $\sqrt{s} = 8$ TeV. Eur. Phys. J. C 76 (2015) 13.
- CMS Collaboration. Observation of the diphoton decay of the Higgs boson and measurement of its properties. Eur. Phys. J. C 74 (2014) 3076.
- CMS Collaboration. Measurement of differential cross sections for the production of a pair of isolated photons in pp collisions at $\sqrt{s} = 7$ TeV. Eur. Phys. J. C 74 (2014) 3129.
- CMS Collaboration. Observation of a new boson at a mass of 125 GeV with the CMS experiment at the LHC. Phys. Lett. B 716 (2012) 30-61