

Curriculum Vitae

Personal information

Surname/ First names **CONTIN GIACOMO**
Addresses Piazza XX Settembre, 7, 33057 – Palmanova (UD) - Italy
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E-mail giacomo.contin@ts.infn.it, giacomo.contin@gmail.com
Date of Birth 26/05/1978
Nationality Italian

Education and training

Dates 1.1.2006 – 3.13.2009
Title of qualification awarded Ph.D. in Physics
Subject “The Silicon Strip Detector (SSD) for the ALICE experiment at LHC: construction, characterization and charged particles multiplicity studies”
Name and type of organization providing education and training Ph.D. Programme in Physics, University of Trieste, 21st cycle
Date 12.17.2004
Title of qualification awarded Master Degree in Physics
Subject Dissertation in Nuclear and Sub-Nuclear Physics on “The ALICE tracking system: characterization and test of the silicon micro strip detectors and their readout electronics”
Name and type of organization providing education and training Faculty of Mathematical, Physical and Natural Sciences, University of Trieste

Working experience

Dates 1.2.2019 - now
Subject **Tenure-track Assistant Professor** in Experimental Physics of the Fundamental Interactions
Projects ALICE ITS Upgrade, Silicon Detector R&D
Organization University of Trieste - Physics Department
Dates 6.11.2017 – 31.1.2019
Subject **Research Associate (Nuclear Physics)** for the development and production of the MAPS-based ALICE ITS detector Upgrade
Projects **ALICE ITS Upgrade**

Main Tasks	<ul style="list-style-type: none"> • Production Manager for the UK contribution to the ALICE ITS detector Upgrade, including: <ul style="list-style-type: none"> ◦ 500 Hybrid Integrated Circuit (corresponding to one fifth of the total production) ◦ 25 Outer Layer Staves (corresponding to a quarter of the total production) • Responsible for the production planning and for the construction, test, validation and delivery of the mentioned parts • In charge of the coordination and supervision of the local construction teams at the Liverpool Semiconductor Detector Center at the Physics Department, University of Liverpool, and at the STFC Daresbury Laboratories • Representing the UK project at the collaboration meetings
Organization	Physics Department, University of Liverpool, and STFC Daresbury Laboratories
Subject	Physics Project Scientist (Silicon Tracking Instrumentation) for the development, production, installation, commissioning and operations support of Monolithic Active Pixel Sensor (MAPS)-based HFT PiXeL detector for the STAR Experiment, and for the development and construction of the ALICE ITS Upgrade and sPHENIX MVTX detectors
Projects	STAR HFT, ALICE ITS Upgrade, sPHENIX MVTX
Main Tasks	<ul style="list-style-type: none"> • Leader of the STAR HFT PXL detector production, assembly, survey • Responsible for PXL sensor and detector QA campaign • In charge of the PXL detector operations, data optimization and maintenance during the data taking at RHIC, BNL • PXL detector integration with Data Acquisition, Slow Control, Trigger systems • PXL readout firmware verification and optimization • Development of python-based slow control software for the PXL detector • Development of C++ classes for open-charm reconstruction QA • Single Event Latch-up and Single Event Upset tests for MAPS sensors • Development of power system for the MAPS-based ALICE ITS Upgrade: SPICE simulation studies, irradiation tests for commercial components, PCB design, FPC prototype validation • Preparation of Proposal, Cost & Schedule and Project Management Plan for the sPHENIX MVTX
Organization	Lawrence Berkeley National Laboratory – Nuclear Science Division - Relativistic Nuclear Collision Group
Dates	11.09.2012 – 10.31.2013
Subject	Postdoctoral Fellow (Silicon Tracking Instrumentation) for the development, production, installation and commissioning of the PXL detector for the STAR experiment
Projects	STAR HFT PXL detector
Main Tasks	<ul style="list-style-type: none"> • Optimization of readout, probe testing, power distribution electronics • Development of detector assembly procedure • Definition of standards and test procedures for production QA • Leader of the MAPS sensor probe testing campaign
Organization	Lawrence Berkeley National Laboratory – Nuclear Science Division - Relativistic Nuclear Collision Group
Dates	2.1.2009 – 10.31.2012
Subject	Postdoc Research Fellow (FIS/01-Experimental Physics) for the “Analysis of the first ALICE data focusing on the Silicon Strip Detector performance”

Projects	ALICE SSD
Main Tasks	<ul style="list-style-type: none"> • Detector assembly, QA testing and reworking, installation • Physics analysis for the study of hyper-nuclei production (ROOT/C++)
Organization	Physics Department – University of Trieste
Date	5.1.2009 - 4.30.2010
Subject	USAS Associate CERN - INFN-CERN Associate program within the LHC experiments at CERN
Projects	ALICE SSD
Main Tasks	<ul style="list-style-type: none"> • Detector integration, commissioning, operations, maintenance, data quality during the data taking at LHC, CERN • ITS Detector and ALICE Experiment operations coordinator
Organization	CERN and I.N.F.N. - Istituto Nazionale di Fisica Nucleare
Dates	7.1.2005 - 6.30.2007
Subjects	Research Grant for a Computing, Electronics and Instrumentation Research related to the Silicon Strip Detectors development and production for the ALICE experiment, I.N.F.N. Trieste laboratories
Projects	ALICE SSD
Main Tasks	<ul style="list-style-type: none"> • Detector production and assembly • Detector performance simulations (ROOT/C++)
Organization	I.N.F.N. – Istituto Nazionale di Fisica Nucleare
Dates	2.1.2005 – 5.31.2005
Subject	Research Grant to continue research on the Silicon Strip Detectors for the ALICE experiment
Projects	ALICE SSD
Organization	Consorzio per la Fisica di Trieste (<i>Physics Consortium of Trieste</i>)

Project Management / Team Coordination Tasks

Dates	December 2017 - now
Role	UK ALICE ITS Upgrade Production Manager
Organization	Physics Department, University of Liverpool, and STFC Daresbury Laboratories
Dates	January 2017 - now
Role	sPHENIX MVTX Subsystem Project Manager
Organization	LBL - RNC Group, BNL - sPHENIX MVTX Collaboration
Dates	October 2016 – now
Role	“R&D towards an Electron-Ion Collider” LDRD co-PI
Organization	Laboratory Directed R&D, LBNL - RNC Group
Dates	August 2016 – now
Role	ALICE Barrel Tracking Upgrade USA – ITS Upgrade Senior Subsystem Manager
Organization	LBL - RNC Group

Dates	May 2016 – September 2016
Role	“HFT PXL Firmware Issue Study” Project co-PI
Organization	LBLN - RNC Group, BNL - STAR HFT Collaboration
Dates	January 2016 –January 2017
Role	“Detector R&D for EIC” Project co-PI
Organization	LBLN – RNC Group
Dates	June 2015 – September 2016
Role	“HFT PXL Repair” Project co-Manager
Organization	LBLN - RNC Group, BNL - STAR HFT Collaboration
Dates	December 2014 – September 2016
Role	HFT PXL Detector Operational Manager
Organization	BNL - STAR HFT Collaboration
Dates	January 2011 - October 2012
Role	Convener of the “Detector Technical Implementation” working group within ITS upgrade for the ALICE experiment
Organization	CERN – ALICE ITS-Upgrade Collaboration
Dates	1.04.2012 – 30.04.2012
Role	ALICE Period Run Coordinator - Coordinator of the ALICE experiment operations for April 2012
Organization	CERN – ALICE Experiment
Dates	1.10.2011 – 29.02.2012
Role	ITS Subsystem Run Coordinator – Coordinator of the ALICE Inner Tracking System operations during the 2011 Pb-Pb collision period
Organization	CERN – ALICE Experiment
Dates	March 2010 - March 2011
Role	SSD Subsystem Run Coordinator – Coordinator of the ALICE Silicon Strip Detector operations
Organization	CERN – ALICE Experiment
Dates	January 2010 – October 2012
Role	SSD Subsystem Technical Coordinator and <i>Technical Board member</i>
Organization	CERN – ALICE Experiment
Dates	May 2009 – October 2012
Role	SSD On-call Expert
Organization	CERN – ALICE Experiment

Job Qualifications

Date	01.23.2014
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Subject **National Scientific Qualification as Associate Professors** in Experimental Physics
(*Abilitazione Scientifica Nazionale a Professore di Seconda Fascia*)

Organization M.I.U.R – Italian Ministry of University and Research

Date July 2009

Subject **Idoneita' "R5"** (*bando INFN 13153/2009*)
(*INFN certification for postdoc research positions*)

Organization I.N.F.N. – Istituto Nazionale di Fisica Nucleare

Awards

Date September 2017

Subject **SPOT Recognition Award Program**

Organization Lawrence Berkeley National Laboratory

Personal skills and competences

Mother tongue **Italian**

Self-assessment
European level

English

French

Understanding		Speaking		Writing			
Listening		Reading		Spoken interaction		Spoken production	
C2 Proficient User							
B2 Intermediate User	B2 Intermediate User	B1 Intermediate User					

Technical skills and competences

Silicon pixel and strip sensors, fast analog front-end electronics chips, FPGA-based readout boards, fast trigger logic system, powering systems, aluminum and copper conductor interconnect technology, wire bonding and ultrasonic tape automated bonding techniques, motion controllers, coordinate measuring machines, liquid- and air-based cooling systems, safety interlock systems

Computer skills and competences

Operating Systems: expert user of Linux and Windows.
 Programming languages: C++, ROOT, Python, Windows Batch, Bash;
 Development tools: LabVIEW, EPICS, MEDM, SPICE, MySQL, OrCad Design, Cadence Allegro, SolidWorks
 Project Management Software: MS Project