Curriculum Vitae

Personal Data

Dr. Michele Viti Kirchenstraße 9 22869 Schenefeld

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Date of Birth: 17. April 1978 Place of birth: Arezzo, Italy Nationality: italian, german



Work Experience

01.2010-today Deutsches Elektronen-Synchrotron DESY Hamburg, researcher

PROJECTS:

04.2012-today Development of the software for instrumentations for beam control feedback and sychronisation systems for the accellerators XFEL and FLASH I/II in DESY.

06.2012-03.2015 Project PERCIVAL, Development of a CMOS imaging detector

01.2010-05.2012 ALFA Project for ATLAS Experiment at CERN (Geneva, Switzerland). Development and installation of tracking detector composed by scintillating fibers located in vacuum holders along the beam pipe at the LHC accelerator

SOFTWARE:

Operating System : Ubuntu Linux (12.04 und 16.04), Scientific Linux, Windows XP/7

Program Languages : C++11, Python

Software frameworks : Qt, ChimeraTK, ROOT, Marlin

SCADA : DOOCS

Libraries : GSL, ZMQ, boost, Minuit, HDF5

 $\begin{array}{ll} \textbf{Hardware} &: \operatorname{MTCA} \ \operatorname{Standard} \\ \textbf{Version} \ \textbf{Control} &: \operatorname{SVN}, \operatorname{Git} \\ \end{array}$

 $\textbf{Integrated Development Environment} \quad : Eclipse, \ Qt \ Creator$

02.2005-01.2006 Perugia University, Italy, researcher

Tasks:

Continuation of the masterthesis work.

Doctoral Studies

02.2006-12.2009 Deutsches Elektronen-Synchrotron DESY, Zeuthen, Linear Collider

Group.

Subject: "Precise and Fast Beam Energy Measurements at the Interna-

tional Linear Collider"

SOFTWARE:

Operating Systems: Ubuntu Linux, Scientific Linux, Windows XP

Program Languages : C++, Python, Fotran

Software frameworks : GEANT 4, ROOT

Libraries : Minuit

Monte Carlo Generators : CAIN, COMRAD

11.2009 PhD thesis defense

Master Studies

11.1997-10.2004 Perugia University, Italy, Elementary Particle Physics. Subject of the

thesis: "Evaluation of a Tracking Algorithm for the Trigger of the KO-

PIO Experiment on the Decay $K_L^0 \to \pi^0 \nu \bar{\nu}^{"}$

SOFTWARE:

Operating Systems: Windows XP, Red Hat Linux

Program Languages : Fortran, C

Software frameworks : GEANT 3, PAW

Libraries : OpenGL

High School

07.1997 Scientific High School Liceo Scientifico "G. da Castiglione", Castiglion

Fiorentino, Italy

Leadership Positions

07.2011-05.2012 Coordinator of the Data Preparation Group for das ALFA Project

Lehre

07.2006-02.2012 Supervision of DESY Summer students und Master students

02.2015 Internship in Grootmoor High School

Business Stays Abroad

02.2006-12.2014 Living and working in Germany (since 12.2014 german citizen).

2006-2007 5 periods of stay in Stanford University, USA

02.2008 Nowosibirsk, Russian Federation

01.2010-06.2012 Regular travels to Geneva, Switzerland

Spoken Languages

Italian native German fluent English fluent

Weitere EDV Knowledge

MS OFFICE, LATEX, UML

Hobbies Sailing (Licenses: SBF Binnen, SBF See, SKS, SRC, UBI, FKN)

Crew member of the historical ship "Zuversicht", "Verein Jugendsegeln

e.V.", Kiel

Club member Museumshafen Övelgönne e.V., Hamburg

Hiking

Motorcycle

Low German Laguages

Hamburg, 12. September 2017

European XFEL GmbH Holzkoppel 4 22869 Schenefeld Germany

Hamburg, 12. September 2017

Application as Software Engineer

Dear Dr. Brockhauser,

My name is Michele Viti and I would like to apply for the position as Programmer - Scientific Instrument Support Engineer.

I studied elementary particle physics at the Perugia university, with a thesis on the simulation of the trigger for the experiment KOPIO on a rare decay of the Kmeson. I started my PhD in 2006 in DESY Zeuthen, working in the linear collider group. My work concentrated on both simulations and beam test data analysis for the development of systems for a precise beam energy measurement at the International Linear Collider.

After successfully defending my PhD thesis, I started my postdoctoral research in DESY Hamburg. In DESY Hamburg I have been working for three groups, namely the ATLAS group, the HASYLAB detector group and my current group, the machine beam control (Maschine Strahlkontrollen, MSK) group.

In the ATLAS experiment I was part of the ALFA project leading the data preparation group which was responsible for the preprocessing and preparation of the beam test and tunnel data.

In the HASYLAB detector group I worked for the PERCIVAL project, a novel CMOS imaging detector, developing the data acquisition system for the test setup, and a framework for the processing and the analysis of the data. As well as software tasks, I contributed to physical studies like the determination of the linearity of the ADCs and measuring the resolution of the detector.

In the MSK group I'm currently developing the software for the slow control and data acquisition for the beam arrival time monitors at FLASH I/II and XFEL and the library for the stepper motor control.

Starting as a pure physicist, I moved in these years to more engineering tasks. This was driven by both personal interest and work necessity. This evolution matured in the current group where I work together with programmers and software engineers.

What I can offer for this position is a very good combination of physics knowledge and professional experience in the software development, especially for slow control, data acquisition and analysis for measuring instruments and photon detectors.

with best regards