

# Curriculum Vitae of Armando Fella

Mobile: + 39 349 81 00 209, E-mail: armando.fella@pi.infn.it

All statements in this document correspond to the truth in accordance with Articles 46 and 47 of Italian D.P.R. 445/2000

## Personal data

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Birth place and date: Pisa (Italy), June 3rd 1974

Nationality: Italian.

Marital status: Married.

Address: Via Francesco Pardi 14, 56124, Pisa, Italy.

Cell phone: +39 349 8100 209

INFN-Pisa office: +39 050 22 14 806

E-mail: armando.fella@pi.infn.it

armando.fella@slac.stanford.edu

## Education

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November 2011: Start of Ph.D. studies in Computer Science, Ferrara University, Italy

November 2010: Second INFN International School on architectures, tools and methodologies for developing efficient large scale scientific computing applications (ESC), Ce.U.B. Bertinoro, Italy.

July 2008: International Summer School of Grid Computing (ISSGC).

February 2008: Cisco Certified Network Associate (CCNA).

September 2007: CERN School of Computing (CSC).

February 2005: INFN-GRID/EGEE Tutorial: Users and Administrator, Turin (Italy)  
<http://www.grid-tutorial.to.infn.it>

May 2001: Master degree in Computer Science, Pisa University (five years cycle). Degree Thesis about encrypting and compressing methods. Advisor: Prof. F. Luccio. Grade 102/110.

## Contracts, fellowships and post-docs for research activities

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23/08/2010 - 30/08/2013: CNRS/LAL contract as “Ingénieur informaticien” to be spent at INFN-Pisa institute in Pisa, Italy. Affiliation: SuperB experiment.

01/04/2008 - 31/03/2010: INFN post-doc (Assegno di Ricerca) at INFN-CNAF Italian Tier1 in Bologna, Italy. Theme: “BaBar data and software management in support to the Tier1 activity”. Affiliation: BaBar experiment.

10/01/2006 - 09/01/2008: INFN post-doc (Assegno di Ricerca) at INFN-CNAF Italian Tier1 in Bologna, Italy. Theme: “Experiments support in the use of Tier1 and INFN GRID”. Affiliation: BaBar experiment.

01/12/2003 - 30/01/2005: INFN technological fellowship at INFN-Pisa. Theme: “Software development and support to data analysis for CDF experiment (Collider Detector at Fermilab)”.

15/10/2003 - 15/12/2003: Collaboration contract with Consorzio Pisa Ricerche at INFN-Pisa. Theme: “Design and project the information system and computer farm for CDF experiment (Collider Detector at Fermilab)”.

03/03/2003 - 02/07/2003: Collaboration contract with Physics Department of Pisa University at INFN-Pisa. Theme: “Computing farm management for CDF experiment (Collider Detector at Fermilab”.

Certificate of work eligibility (idoneitá) for *rapperti di lavoro a tempo determinato di personale tecnologo di terzo livello* obtained via INFN national public competitions 10NT3COM and 7NT3STR, 2007.

## Academic activities

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### Teaching

Spring semester 2010: teacher of the course “Compilers and formal languages”, master degree, Computer Science department at Ferrara University, Italy.

Summer semester 2008: lecturing tutor (30 hours) of “Internet architecture” course. Prof. Marco Roccati, Internet Science department, Bologna University, Italy.

Summer semester 2007: lecturing tutor (30 hours) of “Internet architecture” course. Prof. Marco Roccati, Internet Science department, Bologna University, Italy.

### Tutoring (co-relatore)

Summer semester 2013 (expected): bachelor’s degree tutor of Alberto Mesin - Ferrara University, Italy, Computer Science degree. Thesis project: development of job resubmission, input driven system for the SuperB distributed workload management platform. Supervisors: L.Tomassetti and E.Luppi.

Spring semester 2012: bachelor’s degree tutor of Andrea Galvani - Ferrara University, Italy, Computer Science degree. Thesis: “Data analysis use case in distributed environment using Ganga framework”. Supervisors: L.Tomassetti and E.Luppi.

Winter semester 2011: bachelor’s degree tutor of Enrico Vianello - Ferrara University, Italy, Computer Science degree. Thesis: “Development of a Grid job submission system for simulation use case for small-middle Virtual Organization”. Supervisors: L.Tomassetti and E.Luppi.

Summer semester 2011: bachelor’s degree tutor of Matteo Favaro - Ferrara University, Italy, Computer Science degree. Thesis: “Development of a job wrapper for the execution of simulation application on distributed resources”. Supervisors: L.Tomassetti and E. Luppi.

Spring semester 2010: bachelor’s degree tutor of Laura Vettorello - Ferrara University, Italy, Computer Science degree. Thesis: “Analysis and development of GANGA submission tools for SuperB

project". Supervisor: L.Tomassetti.

Winter semester 2010: bachelor's degree tutor of Marco Ronzano - Ferrara University, Italy, Computer Science degree. Thesis: "Development of a web interface RESTful based, aimed to Grid job submission and monitor management". Supervisor: L.Tomassetti.

Winter semester 2009: bachelor's degree tutor of Giovanni Fontana - Ferrara University, Italy, Computer Science degree. Thesis: "Study and development of a scheduling system in a distributed environment". Supervisor: E.Luppi.

Spring semester 2009: bachelor's degree tutor of Michele Braghini - Ferrara University, Italy, Computer Science degree. Thesis: "Study of software installation system in a distributed environment". Supervisor: A.Gianoli.

## Scientific activities

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### Affiliations

January 2009 - present: SuperB experiment

March 2009 - April 2010: EGEE SA1.3 group: support to VOs, Users, Applications. MPI support for users and site managers.

October 2006 - present: BaBar experiment

March 2003 - November 2006: CDF experiment

### Main-activity summary

I am one of the key person in SuperB computing activities focused on **distributed computing** field. I am the primary **Virtual Organization (VO) administrator**, I was coordinating the distributed computing working group which was committed in the definition of SuperB computing model both from the data and the workload management point of view. I am directly involved in the development of the framework for Monte Carlo simulation production allowing the exploitation of distributed resource affiliated to **EGI and OSG** Grid initiatives; the implicated technologies are **PostgreSQL, apache, PHP/Python/jQuery, RESTful web service, gLite/EMI middleware**. I was the responsible for the distributed resource enabling and reference person for site contacts: VO configuration, software installation, storage and CPU resource setup and testing. I am involved in DIRAC plugin design and GANGA plugin development consisting of a Grid/Cloud management system and a access frontend layer for distributed analysis in Grid respectively. I am directly involved in the SuperB data model definition, the work macro areas are: **WAN data access** studies (<http://webdav>, xRootD), **storage system** evaluation, **meta data catalog** (LFC ng, DFC) and **mass data transfer** system (FTS2/3). During my four years of INFN post-doc at CNAF Tier1 center I worked in setup, management and test of the following storage and SRM systems: **GPFS/StoRM, xRootD, dCache, and TSM**.

*[Please refer to the next sections "Description of scientific activity" for a detailed and complete description (page 7).]*

## **Conferences organization**

March 2011: SuperB Computing R&D Workshop, program committee. University Institute for Higher Studies IUSS, Ferrara. <http://www.fe.infn.it/superb11>

March 2010: SuperB Computing R&D Workshop, program committee. University Institute for Higher Studies IUSS, Ferrara. <http://www.fe.infn.it/superb>

## **European call application experience**

2009/2010: collaboration in application work-flow to a Framework Program 7, Small or medium-scale research project (STREP) ICT FET Open Call, FP7-ICT-2009-C: "EXtreme Simulations Of QUantum Systems: EXSOQUS"

## **Editorial Committee participation**

March 2012 - in progress: SuperB Collaboration document. Title: "SuperB Detector Technical Design Report".

September 2009 - July 2010: SuperB Collaboration document. Title: "SuperB Progress Report - Detector". ArXiv:1007.4241, INFN-AE-10-4, LAL-10-115, SLAC-R-954.

## **Manuscript review activity**

Journal of Physics: conference series. <http://chept2012.edmgr.com/>

## **Experience abroad**

09/01/2006 - 09/15/2006: within BaBar Grid project, activity of software development/testing at **Stanford Linear Accelerator Center (SLAC)**, Stanford California, USA. [*Detailed reference in section "Past activity"*].

2003-2005, one year all over the period: working within CDF experiment and Fermilab IT division, at **Fermi National Laboratory, Fermilab**, Chicago IL, USA. The activity includes the development and testing of data handling system tool based on SAM-GRID technology and the development/setup of CDF LCG-CAF project. [*Detailed reference in section "Past activity"*].

1996: Socrates Project fellowship, six months at **Queen Mary College, London, UK**.

## **Skills**

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Group leading, coordination, motivation and work recruitment. Problem solving. Architectural design of distributed systems, development and deployment of framework for distributed resource exploitation.

### **Data management systems**

2012-2013: knowledge of HadoopFS architecture, components and features;

2009: client side installation and configuration experience in TSM (Tivoli Storage Manager (IBM)) system at INFN CNAF Tier1 for BaBar experiment;

2008-2010: good experience in setup, configuration and tuning of GPFS system at INFN CNAF Tier1 for BaBar experiment;

2006-2008: deep experience in setup, configuration and tuning of xRootD system at INFN CNAF Tier1 for BaBar experiment;

2005: experience in administrator, setup and deployment of SAM system at INFN CNAF Tier1 for CDF experiment;

2004: experience in administrator, setup and deployment of resilient dCache system at INFN CNAF Tier1 for CDF experiment;

### **Distributed computing**

- Experience in installation and tuning of OpenStack Cloud system, study of WNoDeS project (INFN-CNAF) in the context of the OpenStack-WNoDeS integration.

- Deep experience in scientific Grid tools and middlewares. EGI/EMI and OSG middleware context: VO administration, JDL/Classads, globus/LCG/CREAM CE CLI, Logging and Bookkeeping CLI, WMS brokering optimization via jdl, VOMS CLI (configuration and management), MyProxy CLI, LFC CLI, LCG-Utils, SRMv2.2 protocol and CLI for specific SE (StoRM, Lustre, dCache) management, SAM (Grid service monitor/alarm system based on Nagios), Information System (IS): general experience in BDII/GOCDB infrastructure, monitoring systems and ldap queries based on GLUE schema, FTS mass data transfer, CVMFS, Apache Gridsite module configuration, use of various accounting/workload monitor systems. Experience in setup, plugin programming and use of: Ganga and Dirac systems.

- Local Resource Manager System (LRMS): LSF and PBS

### **Programming skills**

Programming languages: C, C System V, C++, Java

Scripting languages: Python, Bash, Tcsh, Php, Javascript, jQuery

Query languages: SQL (PostGreSql e MySql)

Markup languages: HTML, XML, WSDL

2009-2010: experience in projecting and development of RESTful architecture;

2005-2010: experience in design and management of database MySql and PostGreSQL;

2001 and 2008: experience in CORBA/SOAP programming/design for a project of Web Content Management System and in the context of CSC Cern School of computing;

2000: experience in system programming using C System V libraries, multi-threading programming, socket, semaphores, shared memories and queues data structures: development of a distributed shared memory system on LAN environment using multi-threading programming.

## **System and networking**

- Fabric management: setup and configuration of racks of servers in Storage Area Network (SAN) infrastructure (power supply, network setup (FC/eth on FC/eth switch)), OS management via daisy chain wiring scheme (Raritan) and IPMI remote control.
- Strong experience in Quattor, a system administration toolkit for the automated installation, configuration, and management of clusters and farms.
- Networking subject: TCP/UDP low level tuning, in occasion of the performance test on Ethernet links 10Gb/s transmission using point-to-point and simulated Storage Area Network architecture. Measurements have been performed using different parameters: frame buffer tuning, send/receive buffer size, kernel soft/hard interrupt handler;
- Experience in network services and application: iptables, route/ip, ethtool, dhcp, bind, wire-shark and network file systems: NFS, AFS, GPPS;
- Web technologies: Apache configuration/tuning, LAMP infrastructures, RESTful web service;
- Deep knowledge of Linux RedHat-based Operating Systems. Tuning of file system parameters, partitioning and optimization for data and computing server roles.

## **Other working experiences**

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February 2002: Collaboration contract with Pisa University, Applied Mathematics department “U. Dini” for the development of a web based content management system.

April 2001: Founder of *Net7*, an Open Source software company ([www.netseven.it](http://www.netseven.it)).

## **Spoken languages**

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**Italian:** Mother tongue

**English:** Excellent

**Others:** Basic knowledge of French and Spanish

## **Military service**

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Civil service completed on January the 16th, 2002.

## **Description of scientific activities**

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### **Present activity**

I am involved in SuperB computing activities focused on distributed computing field. I coordinated the distributed computing working group committed in the definition of SuperB computing model both from the data and the workload management point of view. The R&D topics treated by the group are:

- Workload management studies

Dirac extension development for SuperB (science Grid and cloud resources)

SuperB Ganga plugin development for data analysis use case in distributed environment

Distributed MC production framework

- Data model definition

WAN data access studies (<http://webdav>, xRootD)

Storage system evaluation (HadoopFS, GlusterFS)

I am the primary administrator of SuperB VO and the coordinator of experiment contacts all over the sites of reference in EGI, OSG and cloud infrastructures. I am coordinating the Italian and foreign site contacts for SuperB VO enabling, setup and testing of production distributed environment. I am cooperating in the role of simulation production manager for SuperB experiment. I am directly involved in simulation production framework development, Ganga plugin development and WAN data access studies.

### **Past activity**

My past working activities include various projects related to distributed computing field, data handling systems, metadata catalogue, mass data transfer systems (optimization and performance test of 10Gb/s data transfer) and storage systems management. In the last ten years I was involved in CDF, BaBar and SuperB experiments; I cooperated in the porting steps of workload management software from local to distributed resource environment.

In the context of the INFN post-doc (Assegno di Ricerca) (2006-2008) at INFN CNAF center, I was involved in the following activities (in chronological order):

- data handling management for BaBar experiment at INFN CNAF. Configuration, deployment, monitoring and testing of xRootD, NFS, AFS and subsequently GPFS for data access and shared areas involved in analysis and production experiment use case;
- data access performance and comparative tests: in occasion of BaBar official data access system porting from xRootD to GPFS (2007), a general comparative test involving the entire center resource including GPFS, xRootD, dCache and Castor performance measurements (2008), a comparative test involving the BaBar and ALICE analysis framework, GPFS vs xRootD (2008);
- BaBar Grid project: primary administrator of BaBar Virtual Organization; development of a software layer permitting to interface official BaBar job management system with LCG/gLite Grid infrastructure for Monte Carlo production on INFN Grid;
- performance test of 10 Gigabit Ethernet using commodity hardware, see related publication;

- enabling and test of MPI job submission at INFN CNAF farm: configuration and test of INFN CNAF LSF batch system to permit the MPI job exploitation (16,32 parallel processes)
- test of Scientific Linux 4/5 kernel optimization aiming the evaluation of a power saving strategy on i686/X86\_64, intel ed AMD architectures;

In the context of INFN technological fellowship at INFN-Pisa (2003-2005), during the CDF collaboration period I have been involved in the following activities:

- development of a C++ Class and its python interface included in CDF experiment offline software layer. Goal: the improvement of monitoring, I/O Logging and user notification functions. The work has been performed at Fermilab, Chicago, IL, USA, 2005;
- setup and configuration of CDF computing farm at INFN CNAF. A Resilient dCache system has been installed and configured, the SAM, distributed data handling system, has been installed and setup and configured. The administrated batch system tested have been pbs/fbsng/condor;
- development of the Sam\_Upload tool for data transfer management in SAM-GRID distributed environment. Collaboration with Fermilab Computing division, SAM team. The tool has been developed in Python language and includes GSI authentication management on low level gridftp transfers (CDF Note 7748);
- collaboration in CDF skimming tool development based on SAM, distributed data handling system, and Sam\_Upload tool. Bs Mixing group inclusion (CDF Note 7474, Bs Mixing technical notes);
- member of Experiment Computing Grid Integration (ECGI) project with the role of CDF responsible for work-flow porting to gLite/LCG environment.
- development of CDF job management and monitoring software layer permitting LCG Grid resources exploitation. The project name is LCGCAF;

## Books

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1. D.Andreotti, A.Fella, E.Luppi *Simulated Events Production on the Grid for the BaBar Experiment*, book section, DOI: 10.4018/978-1-60566-184-1.ch022. Book: *Handbook of Research on Grid Technologies and Utility Computing: Concepts for Managing Large-Scale Applications* published by Emmanuel Udoh and Frank Zhigang Wang ISBN978-1-60566-184-1(hardcover) ISBN978-1-60566-185-8(ebook) (226-234). Published in USA and UK by Information Science Reference (an Imprint of IGI Global) 701E Chocolate Avenue, Hershey PA 17033

## Articles in international journals (peer reviewed)

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1. A.Fella, G.Donvito, E.Luppi, M.Manzali, L.Tomassetti, E.Vianello, *Exploiting grid resources for data simulation by using a general-purpose framework*. PoS(EGICF12-EMITC2)045.
2. A.Fella, G.Donvito, B.Santeramo, *SuperB evaluation of Dirac Distributed Infrastructure*. PoS(EGICF12-EMITC2)030.
3. A.Fella, F.Bianchi, V.Ciaschini, M.Corvo, D.Delprete, A.Di Simone, G.Donvito, F.Giacomini, A.Gianoli, S.Longo, S.Luiz, E.Luppi, M.Manzali, A.Perez, S.Pardi, M.Rama, G.Russo, B.Santeramo, R.Stroili, L.Tomassetti, *DIRAC evaluation for the SuperB experiment*. 2012 J. Phys.: Conf. Ser. 396 032037 DOI:10.1088/1742-6596/396/3/032037.
4. F.Bianchi, V.Ciaschini, M.Corvo, D.Delprete, A.Di Simone, G.Donvito, A.Fella, F.Giacomini, A.Gianoli, S.Longo, S.Luiz, E.Luppi, M.Manzali, A.Perez, S.Pardi, G.Russo, M.Rama, B.Santeramo, R.Stroili, L.Tomassetti, *Testing and evaluating storage technology to build a distributed Tier1 for SuperB in Italy*. 2012 J. Phys.: Conf. Ser. 396 042045 DOI:10.1088/1742-6596/396/4/042045.
5. D.Antoniev, Z.Deng, J.Ebke, U.Egede, A.Fella, Y.Han, J.Jakub, A.Galvani, M.Kenyon, E.Luppi, M.Manzali, A.Richards, M.Slater, V.Spinoso, L.Tomassetti *BESIII and SuperB: Distributed job management with Ganga*. 2012 J. Phys.: Conf. Ser. 396 032120 DOI:10.1088/1742-6596/396/3/032120.
6. F.Bianchi, V.Ciaschini, M.Corvo, D.Delprete, A.Di Simone, G.Donvito, A.Fella, F.Giacomini, A.Gianoli, S.Longo, S.Luiz, E.Luppi, M.Manzali, A.Perez, S.Pardi, G.Russo, M.Rama, B.Santeramo, R.Stroili, L.Tomassetti, *Exploiting new CPU architectures in the SuperB software framework*. 2012 J. Phys.: Conf. Ser. 396 022010 DOI:10.1088/1742-6596/396/2/022010
7. A.Fella, F.Bianchi, V.Ciaschini, M.Corvo, D.Delprete, A.Di Simone, G.Donvito, P.Franchini, F.Giacomini, A.Gianoli, S.Longo, S.Luiz, E.Luppi, M.Manzali, A.Perez, S.Pardi, G.Russo, M.Rama, B.Santeramo, R.Stroili, L.Tomassetti, *SuperB R&D computing program: HTTP direct access to distributed resources*. 2012 J. Phys.: Conf. Ser. 396 032038, DOI:10.1088/1742-6596/396/3/032038
8. F.Bianchi, V.Ciaschini, M.Corvo, D.Delprete, A.Di Simone, G.Donvito, A.Fella, F.Giacomini, A.Gianoli, S.Longo, S.Luiz, E.Luppi, M.Manzali, A.Paolini, A.Perez, S.Pardi, G.Russo,

M.Rama, B.Santeramo, R.Stroili, L.Tomassetti, *SuperB Simulation Production System*. 2012 J. Phys.: Conf. Ser. 396 022053 DOI:10.1088/1742-6596/396/2/022053.

9. F.Bianchi, V.Ciaschini, M.Corvo, D.Delprete, A.Di Simone, G.Donvito, A.Fella, F.Giacomini, A.Gianoli, S.Longo, S.Luiz, E.Luppi, M.Manzali, A.Perez, S.Pardi, G.Russo, M.Rama, B.Santeramo, R.Stroili, L.Tomassetti, *Computing at SuperB*. PoS(ICHEP2012)488.
10. A.Fella, E.Luppi, L.Tomassetti *A General Purpose Suite for Job Management, Bookkeeping and Grid Submission*. International Journal of Grid Computing & Applications (IJGCA) Vol.2, No.2, June 2011. DOI: 10.5121/ijgca.2011.2202.
11. A.Fella, F.Bianchi, D.Brown, M.Corvo, A.Di Simone, A.Gianoli, E.Luppi, M.Morandin, E.Paoloni, M.Rama, L.Tomassetti, *Computing for the Next Generation Flavour Factories*. 2011 J. Phys.: Conf. Ser. 331 072012 DOI:10.1088/1742-6596/331/7/072012
12. A.Fella, D.Brown, M.Corvo, A.Di Simone, E.Luppi, E.Paoloni, R.Stroili, L.Tomassetti, *The Distributed Production System of the SuperB Project: Description and Results*. 2011 J. Phys.: Conf. Ser. 331 072048 doi:10.1088/1742-6596/331/7/072048.
13. A.Cavalli, S.Dal Pra, L.dell'Agnello, A.Fella, D.Gregori, L.Li Gioi, B.Martelli, A.Prosperini, V.Sapunenko, V.Vagnoni. *Experience with Hierarchical Storage Management based on GPFS and TSM at INFN-CNAF*. PIK - Praxis der Informationsverarbeitung und Kommunikation. Volume 34, Issue 1, Pages 31–36, ISSN (Online) 1865-8342, ISSN (Print) 0930-5157, DOI: 10.1515/piko.2011.005, July 2011
14. A.Fella, F.Furano, L.Li Gioi, F.Noferini, M.Steinke, D.Andreotti, A.Cavalli, A.Chierici, L.dell'agnello, D.Gregori, A.Italiano, E.Luppi, B.Martelli, A.Prosperini, P.Ricci, E.Ronchieri, D.Salomoni, V.Sapunenko, D.Vitlacil *A Comparison of Data-Access Platforms for BaBar and ALICE analysis Computing Model at the Italian Tier1*. 2010 J. Phys. Conf. Ser. 219 072003, DOI: 10.1088/1742-6596/219/7/072003
15. M.Bencivenni, A.Carbone, A.Fella, D.Galli, U.Marconi, G.Peco, S.Perazzini, V.Vagnoni, S.Zani. *High rate packet transmission on 10 Gbit/s Ethernet LAN using commodity hardware*. IEEE-NPSS Real Time Conf. Rec. (2009), DOI: 10.1109/RTC.2009.5321915. ISBN 978-1-4244-4454-0. Page(s): 167 - 182.
16. M.Bencivenni, D.Bortolotti, A.Carbone, A.Cavalli, A.Chierici, S.Dal Prá, D.De Girolamo, L.dell'Agnello, M.Donatelli, A.Fella, D.Galli, A.Ghiselli, D.Gregori, A.Italiano, R.Kumar, U.Marconi, B.Martelli, M.Mazzucato, M.Onofri, G.Peco, S.Perazzini, A.Prosperini, P.P.Ricci, E.Ronchieri, F.Rosso, D.Salomoni, V.Sapunenko, V.Vagnoni, R.Veraldi, M.C.Vistoli, S.Zani, *Performance of 10 Gigabit Ethernet Using Commodity Hardware*. IEEE Transactions on Nuclear Science (TNS). vol. 57, pp. 630 - 641 ISSN: 0018-9499. DOI: 10.1109/TNS.2009.2032264.
17. A.Fella, D.Andreotti, E.Luppi, L.Li Gioi. *Mass production of event simulations for the BaBar experiment using the Grid*. Il Nuovo Cimento, DOI 10.1393/ncc/i2009-10389-4, March 2009.
18. A.Fella, D.Andreotti, E.Luppi. *BaBar events simulation production using the INFN-GRID approach*. Il Nuovo Cimento, pp. 944-946, DOI 10.1393/ncb/i2008-10570-2, October 2008.

19. M.Bencivenni, F.Bonifazi, A.Carbone, A.Chierici, A.D'Apice, D.De Girolamo, L.dell'Agnello, M.Donatelli, G.Donvito, A.Fella, F.Furano, D.Galli, A.Ghiselli, A.Italiano, G.Lo Re, U.Marconi, B.Martelli, M.Mazzucato, P.P.Ricci, F.Rosso, D.Salomoni, V.Sapunenko, V.Vagnoni, R.Veraldi, D.Vitlacil and S.Zani. *A comparison of data-access platforms for the computing of Large Hadron Collider experiments.* IEEE Transactions on Nuclear Science (TNS) DOI: 10.1109/tns.2008.924087, Volume: 55 , Issue: 3, Page(s): 1621 - 1630, June 2008
  
20. M.Bencivenni, A.Carbone, A.Chierici, A.D'Apice, D.De Girolamo, L.dell'Agnello, M.Donatelli, G.Donvito, A.Fella, A.Forti, F.Furano, D.Galli, A.Ghiselli, A.Italiano, E.Lanciotti, G.Lo Re, L.Magnoni, U.Marconi, B.Martelli, M.Mazzucato, P.P.Ricci, F.Rosso, D.Salomoni, R.Santinelli, V.Sapunenko, V.Vagnoni, R.Veraldi, D.Vitlacil, S.Zani and R.Zappi. *Storage management solutions and performance tests at the INFN Tier-1.* 2008 J. Phys.: Conf. Ser. 119 052003 DOI:10.1088/1742-6596/119/5/052003
  
21. S.Sarkar, I.Sfiligoi, S.Belforte, A.Fella, S.C.Hsu, D.Jeans, E.Lipeles, D.Lucchese, M.Neubauer, F.Delli Paoli, F.Wuerhwain. *CDF way to the Grid.* PoS(HEP2005)395

Note: nine (9) published Conference Records in Nuclear Science Symposium CR (NSS/MIC), 2010 IEEE, 2011 IEEE and 2012 IEEE have not been inserted in this list because the peer review process has not been applied.*[Please refer to the next section “Contributions to International Conferences” for contributions details.]*

## **Contributions to International Conferences**

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1. Presenting author A.Fella, F.Bianchi, V.Ciaschini, M.Corvo, D.Delprete, A.Di Simone, G.Donvito, P.Franchini, F.Giacomini, A.Gianoli, S.Longo, S.Luitz, E.Luppi, M.Manzali, S.Pardi, A.Perez, M.Rama, G.Russo, B.Santeramo, R.Stroili, L.Tomassetti, *A Prototype Suite for Data-Analysis Management of the SuperB Experiment.* Poster, IEEE-NSS 2012, Anaheim, California, October 29 - November 3, 2012.
  
2. F.Bianchi, V.Ciaschini, M.Corvo, D.Delprete, A.Di Simone, G.Donvito, A.Fella, P.Franchini, F.Giacomini, A.Gianoli, S.Longo, S.Luitz, E.Luppi, M.Manzali, S.Pardi, A.Perez, M.Rama, G.Russo, B.Santeramo, R.Stroili, L.Tomassetti, *SuperB Production System for Simulated Events.* Poster, IEEE-NSS 2012, Anaheim, California, October 29 - November 3, 2012.
  
3. F.Bianchi, V.Ciaschini, M.Corvo, D.Delprete, A.Di Simone, G.Donvito, A.Fella, P.Franchini, F.Giacomini, A.Gianoli, S.Longo, S.Luitz, E.Luppi, M.Manzali, S.Pardi, A.Perez, M.Rama, G.Russo, B.Santeramo, R.Stroili, L.Tomassetti, *R&D Activities on Data Management and Storage Solutions for SuperB Experiment.* Poster, IEEE-NSS 2012, Anaheim, California, October 29 - November 3, 2012.
  
4. F.Bianchi, V.Ciaschini, M.Corvo, D.Delprete, A.Di Simone, G.Donvito, A.Fella, P.Franchini, F.Giacomini, A.Gianoli, S.Longo, S.Luitz, E.Luppi, M.Manzali, S.Pardi, A.Perez, M.Rama, G.Russo, B.Santeramo, R.Stroili, L.Tomassetti, *A Parallel Framework for the SuperB Super Flavor Factory.* Oral presentation, IEEE-NSS 2012, Anaheim, California, October 29 - November 3, 2012.

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12. A.Fella, G.Donvito, E.Luppi, M.Manzali, L.Tomassetti, E.Vianello, *Exploiting grid resources for data simulation by using a general-purpose framework*. Oral presentation, EGI Community Forum 2012, 26-30 March 2012 Leibniz Supercomputing Centre (LRZ), Garching, Germany.
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18. D.Brown, M.Corvo, A.Di Simone, A.Fella, E.Luppi, E.Paoloni, R.Stroili, L.Tomassetti *First Results from the SuperB Simulation Production System*. Oral presentation, IEEE NSS-MIC 2010, Knoxville, TN, USA (2010).
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22. M.Bencivenni, A.Carbone, A.Fella, D.Galli, U.Marconi, G.Peco, S.Perazzini, V.Vagnoni, S.Zani. *High rate packet transmission on 10 Gbit/s Ethernet LAN using commodity hardware*. Oral presentation, 16-th IEEE-NPSS Real Time Conference (2009).
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## Scientific-activity documents and technical reports

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1. SuperB Collaboration. *SuperB Technical Design Report*, published on 24th June 2013, Report number: INFN-13-01/PI, LAL 13-01, SLAC-R-1003, arXiv:1306.5655 [physics.ins-det].
2. SuperB collaboration, *The SuperB Computing Model*, Open Symposium - European Strategy Preparatory , 10-12 September 2012, Krakow, Poland.  
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3. SuperB Collaboration. *SuperB Progress Report – Detector*, published on 24th July 2010, Report number: INFN/AE 10/4, LAL 10-115, SLAC-R-954, arXiv:1007.4241v1 [physics.ins-det].
4. A.Fella, E.Luppi, C.Luzzi, L.Tomassetti *SBK bookkeeping database draft schema and requirement definition discussion*, 2010, SuperB internal note.
5. D.Andreotti, A.Fella, L.Li Gioi, E.Luppi, *Performance test and comparison of two storage management solutions using BaBar software framework at the Italian Tier-A*, 2009, BaBar Note #1569
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Also **signer of 21 technical reports** by the CDF “ $B_s$  Mixing group”

## **Contributions to experiment collaboration meetings and workshops**

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The following list does not include the participation to the yearly BaBar Italy meetings [2006-2010] in which I presented the Italian status of BaBar Computing and the participation to CDF Italy meetings [2004-2005] in which I presented the status of SAM service deployment at CNAF, Sam\_Upload project and LCGCAF project statuses.

1. A.Fella, *Italian Grid resources and SuperB distributed computing tools*, 8th BelleII Computing WS, 13-17 May 2013, Leinsweiler Hof, Germany.
2. Convener of sessions: *Computing - Distrib. Computing and Computing – R&D*, 6th SuperB Collaboration Meeting, December 2012, Frascati(Roma), Italia.
3. A.Fella, *Production system update*, 6th SuperB Collaboration Meeting, December 2012, Pisa, Italia.

4. Convener of sessions: *Computing - Distrib. Computing* and *Computing – R&D*, 5th SuperB Collaboration Meeting, 19-22 September 2012, Pisa, Italia.
5. A.Fella, plenary talk *Computing status* and *Distributed computing work status*, 5th SuperB Collaboration Meeting, 19-22 September 2012, Pisa, Italia.
6. Convener of sessions: *Computing - Distrib. Computing, Computing – R&D* and *Computing - Planning*, 4th SuperB Collaboration Meeting, 31 May – 5 June 2012, La Biodola, Italia.
7. A.Fella *Distributed Processing and Analysis on Grids and Clouds* and *Distributed computing status*, 4th SuperB Collaboration Meeting, 31 May – 5 June 2012, La Biodola, Italia.
8. Convener of sessions: *Computing - Distrib. Computing* and *Computing – R&D*, 3rd SuperB Collaboration Meeting, 19-23 March 2012, Frascati, Italia.
9. Convener of sessions: *Computing - Distrib. Computing* and *Distrib. Computing - Ganga hands on session*, 2nd SuperB Collaboration Meeting, 13-16 December 2011, Frascati, Italia.
10. A.Fella *Distributed computing status* and *Ganga system introduction*, 2nd SuperB Collaboration Meeting, 13-16 December 2011, Frascati, Italia.
11. Convener of session: *Distributed Computing*, A.Fella *Distributed system status*, 1st SuperB Collaboration Meeting, 13-16 September 2011, Queen Mary and Westfield College, London, UK.
12. Convener of session: *Parallel 2 - Distributed Comp Tools*, A.Fella *Distributed System update*, XVI SuperB Collaboration Meeting, 4-7 April 2011, Frascati, Italia.
13. Convener of sessions: *Parallel Comp: Distributed Computing*, A.Fella *Distributed system status*. XVII SuperB workshop - La Biodola Elba Island, 28 May - 2 June 2011.
14. A.Fella, plenary talk *SuperB Computing status*, Convener of session: *Computing Production*. XV SuperB General Meeting - Caltech - Pasadena, CA, USA 14-17 Dicember 2010.
15. Convener of session: *Computing Production*. XIV SuperB General Meeting - Caltech - Pasadena, CA, USA 14-17 Dicember 2010.
16. Convener of sessions: *Distributed computing and Simulation Production Operation Team Meeting*. A.Fella *Distributed Computing : General Overview* XIII SuperB workshop - La Biodola Elba Island, 30 May - 5 June 2009.
17. A.Fella, *Distributed Computing : General Overview* XIII SuperB workshop - La Biodola Elba Island, 30 May - 5 June 2009.

18. A.Fella, plenary talk *SuperB computing status*. Convener of parallel sessions: *Computing Production* and *Computing II*, A.Fella *Data access and tools, system evolution* and *Distributed Production Overview*, XII SuperB General Meeting - LAPP - Annecy, March 16-19, 2010.
19. Convener of session *Distributed Computing*, A.Fella, *R&D proposal from the session Distributed Computing*. SuperB Computing R&D Workshop, March 9-12, 2010, IUSS, Ferrara.  
<http://www.fe.infn.it/superb>
20. Convener of sessions: *Production tools* and *distributed computing*, A.Fella *Distributed computing status* and *Distributed production*. XI SuperB workshop - LNF, 1-4 December 2009, Frascati (Roma).
21. Convener of I, II parallel sessions, A.Fella *Distributed computing model for TDR X* SuperB General Workshop - SLAC, Menlo Park, CA (USA), October 6-9, 2009.
22. A.Fella *Production tools at CNAF* and *Simulation production resources* IX SuperB Workshop - Perugia, June 16-20, 2009. <http://superb.pg.infn.it/workshop2009/>
23. A.Fella *SuperB GRID: starting work* VIII SuperB workshop - LAL, Orsay, February 15-18, 2009.
24. A.Fella *Data Handling overview at CDF, SAM and dCache* INFN Computing and Networking Workshop 24-28 May 2004.