#### Curriculum Vitae of Cecilia Voena

# Part I – Education and Work Experience

Туре У	lear In	stitution	N	lotes
University graduation	1999	Sapienza Università Roma	di	<ul> <li>Master degree in Physics</li> <li>Final mark: 110/110 cum laude</li> <li>Thesis title: "Fast Monitoring system for the Babar drift chamber"</li> <li>Advisor: Prof. F. Ferroni</li> </ul>
Ph.D. in Physics	2003	Sapienza Università Roma	di	<ul> <li>Thesis title: "CP violating asymmetries in B→D<sup>(*)</sup>π decays with the Babar experiment"</li> <li>Advisor: Prof. F. Ferroni</li> </ul>
Post-doc (assegnista di ricerca)	2003- 2005	Istituto Nazionale di Fis Nucleare (INFN), sezione Roma	ica e di	- Topic: "Measurement of the angle γ at Babar"
Researcher	2005- 2009	INFN, sezione di Roma		- Art.23 by national selection 1N/R3/SUB
Staff researcher	2009 on going	INFN, sezione di Roma		- Current position - III level
Associate professor	2022 on going	Sapienza University Rome	of	<ul> <li>SC 02/A1 e il SSD FIS/01</li> <li>Experimental Physics of</li> <li>Fundamental Interactions</li> <li>current position</li> </ul>

### Part II – Academic Appointments

Start	End F	Position
07/03/2025	07/03/2037	"Abilitazione Scientifica Nazionale", I fascia, settore 02/A1
07/03/2025	07/03/2037	"Abilitazione Scientifica Nazionale", I fascia, settore 02/D1
2024	on-going	Member of the "collegio di dottorato" in Fisica (Sapienza)
02/11/2022	on-going	Associate professor: "Procedura selettiva di chiamata per Professore di ruolo di seconda fascia presso il Dipartimento di Fisica – Facoltà di Scienze Matematiche Fisiche e Naturali per il SC 02/A1 e il SSD FIS/01" (Sapienza)
2022	2024	Member of the "collegio di dottorato" in oncology and translational medicine (Sapienza - Sant'Andrea)
05/10/2018	05/10/2034	"Abilitazione Scientifica Nazionale " II fascia, settore 02/A1

# Part III - Other Appointments, Coordination Roles, Roles

2024-on going	Member of "Commissione di Ricerca di Ateneo" (Sapienza), representative for the Physics department, macroarea A
2023	Member of the committee for the admission at the Ph.d school in Physics at the Physics department of Sapienza Università di Roma, 39°
2023	Member of the committee in the selections AR 169-170/2022 for the assignment of n 5 "Assegni di Ricerca" at the Physics department of Sapienza Università di Roma
2023-on- going	Member of the committee "Changes of bachelor/master courses" which validates exams of students that want to access courses in Physics at Sapienza Università di Roma from other courses
2023	Member of the panel for the selection of the INFN patents to be presented at the call POC MIMIT PNRR
2022- <b>on</b> -	Member of the panel INFN4LS (INFN for Life Science)
going	
2022-on-	INFN delegate of the ALISEI cluster for life-science
<b>going</b>	Member of the committee in the competition on MEPA for the assignment of the
2022	consultancy services for communication on TT INFN activities (INFN open)
2021-on-	Member of INFN National Technological Transfer Committee
going	
2020-2021	Local representative of INFN Technological Transfer Committee at INFN-Roma
2020-2023	Responsible of the NEPTUNE Work Package 2 (INFN approved experiment)
2020-2023	Responsible of the NEPTUNE Rome group (INFN approved experiment, average annual budget: 10kE)
2019-2023	Member of the MEG Speaker Bureau
2012-	Team Leader at CERN for the MEG Rome group
ongoing	
2012-	Responsible of the MEG Rome group (international collaboration for the INFN
ongoing	approved experiment MEG and MEG II, average annual budget: 50kE)
2012-2022	"Responsabile Unico del Procedimento" (RUP) at INFN Roma
2016-2019	Roma
2014-2017	Member of INFN Comitato Unico di Garanzia (CUG)
2012	Member of the examination board for the assignment of the "Conversi Prize" (best Ph.D thesis in High Energy Physics instituted by INFN)
2011	MEG shift coordinator
2006 - 2007	Convener of the sin2 $\beta$ working group in the Babar experiment
2005 - 2007	Flavor tagging coordinator in the Babar experiment
2006 - 2008	Member of the panel for the coordination of Physics analysis in Italy for the Babar experiment
2003	Deputy run coordinator for the Babar experiment
2004 - 2009	Babar representative in the international Heavy Flavor Averaging Group
1999	Fellowship for "laurea thesis" abroad, given by Sapienza Università di Roma
1997	Fellowship for "collaboration" (150 hours) with the Electronic LAB at Sapienza Università di Roma

Course

# **Part IV – Teaching Experience**

#### **IVA - Courses**

Year Institution

2024-on- going	Sapienza Università di Roma	Physics Laboratory I (teacher, I year, master in Physics, 6 CFU)
2022-2024	Sapienza Università di Roma	Fisica for Scienze Naturali (teacher, 6 CFU)
2022 <b>-on-</b>	Sapienza Università di Roma	Fisica for CTF (teacher, 8 CFU)
going		
2023- <b>on-</b>	National Phd in Artificial	AI in medical image analysis (teacher for 8/30 hours)
going	Intelligence -Life Science	
2022	Sapienza Università di Roma (Sant'Andrea Phd school in "Oncologia e Medicina Traslazionale")	Lesson on "Artificial intelligence in the analysis of medical images"
2009-2022	Sapienza Università di Roma	Laboratory of Nuclear and Subnuclear Physics for physicists (tutor)
2020	Scuola di specializzazione in Fisica Medica Università Cattolica del Sacro Cuore	Lesson on "Artificial intelligence in the analysis of medical images"
2002-2003	Sapienza Università di Roma	General Physics for biologists (assistant)
2001-2002	Sapienza Università di Roma	General Physics for pharmacists (assistant)
2000-2001	Sapienza Università di Roma	General Physics for physicists (assistant)

#### **IVB - Theses**

Tutor of > 20 master degree theses, >7 first level theses (dissertazioni), 4 PhD theses.

#### IVC – III Mission

Year P	roject Not	tes
2024- ongoing	Lab2GO	Coordinator of Lab2go-Fisica for Sapienza
2023-on- going	NextGenerationEU	- teacher
2024	She rocks science	International day of women and girls in science (Physics Department) - co-organizer
2019-2022	Author for Fisicast	- Podcast about Physics https://www.radioscienza.it/fisicast
2019	Rome CUP 2019	- Partecipazione with stand (INFN related activities).
2019	Pomeriggio di approfondimento	<ul> <li>Organizzato da ADU Sapienza</li> <li>Intervention on "Artificial Intelligence and medicine"</li> </ul>
2017-2022	Tutor in Lab2go	- Diffusion of the laboratory practice in high schools, http://www.roma1.infn.it/LAB2GO

# Part V - Society Memberships, Awards and Honors

Year Role

2009	"Ettore Pancini" prize assigned by the Italian Physics Society for the relevant contribution given to the Babar experiment		
2009-2013	3 Member of the Italian Physics Society		

### Part VI - Participation to International Research Institutes

Year Institution		
2007-on going	Paul Scherrer Institute (Villigen, Switzerland)	
2007-on going	CERN (Geneva, Switzerland)	
1998-2010	Stanford Linear Accelerator Center (Stanford, CA)	

# Part VII - Funding Information as Principal Investigator-PI or Investigator-I

Year	Title I	Program	Grant value
2024- on going	Eco-friendly gas mixtures and innovative geometries of detectors for future muon physics (PI)	Bandi Ateneo (Sapienza) 2023- Progetto Medio	11kE
2023- on going	REal-time motion CorrEctioN in magneTic REsonance (RECENTRE) (I)	PRIN 20233-PNRR	
2022- on going	PNRR-MAD-2022-12376889 (I)	PNRR:M6/C2_CALL 2022	192kE (INFN unit budget)
2020- on going	MUCCA (PI of the INFN unit)	CHIST-ERA IV – Call 2019	200kE (INFN unit budget)
2020- on going	ATTRACT (I)	AIRC IG 2020	650kE
2020- 2023	Neptune Roma1 (PI)	INFN-commissione scientifica nazionale 5	10kE (annual average)
2012- on going	MEG Roma1 (PI)	INFN-commissione scientifica nazionale 1	50kE (annual average)
2017- 2020	FILOBLU (I)	POR-FESR Life2020	700kE
2013	Development of a drift chamber with cluster timing and counting capabilities for High Precision High energy Physics (I)	FIRB	900kE
2008	Dual readout calorimetry (I)	PRIN	unknown

# Part VIII - Technological Transfer

Year Item

2021- ongong	Member of the INFN national committee for technological transfer	
2020-	Scientific responsible of "Research collaboration agreement" with the start-up MedLea	
2023	srls in the project "Prognosis and optimization of COVID-19 therapy"	
2012	Co-inventor of Patent RM2013A000050 (deposited in 2013) "Sonda di rivelazione di	
2012	radiazione beta per l'identificazione intraoperatoria di residui tumorali"	

### Part IX - Review Activity

#### Year Role

2023	Member of the evaluation panel of the European call on Open & Reusable Research Data & Software (Call ORD) of the CHIST-ERA network of research funding organisations
2022	Reviewer for Instruments (MDPI)
2020	Reviewer for Nuclear Instruments and Methods in Physics Research Section A
2016- 2017	Reviewer for "Research projects in physics, mathematics or engineering sciences related to cancer" (Cancer ITMO and INSERM)

#### Part X - Editorial Committee

Year Role

2021-2025	Member of the Editorial Board of the journal "Symmetry" (MDPI)
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### Part XI - Organization of Meetings

### Year Position

### Conference

2024	Member of the local organizing committee	"The Rise of particle Physics" at the Physics Department of Sapienza (23-24 September 2024)
2021	Member of the local organizing committee	"Shedding Light on X17" in Rome
2019	Session Chair	105th Congresso Nazionale della Società Italiana di Fisica
2010	Member of the local organizing committee	"Incontri della fisica delle alte energie" in Rome, IFAE

#### Part XII – Research Activities

Keywords

Brief Description

Particle Physics MEG(II) experiment (2007-ongoing) Topic: Search of Physics beyond Standard Model, Lepton Flavor Violation	<ul> <li>The MEG(II) experiment searches for the charged lepton flavour violating decay μ→eγ at the Paul Scherrer Institute. The MEG collaboration, composed of ~60 physicists from Italian, Swiss, Japanese, US and Russian institutions, set the most stringent limit in the world (4.2x10<sup>-13</sup>@90% C.L.) with the data set collected in the years 2009-2013.</li> <li>The experiment has been upgraded (MEGII) to improve the sensitivity by one order of magnitude (down to ~5x10<sup>-14</sup>) in a 3 years data taking period. until 2026.</li> <li>The first result of MEGII was published in 2024 and its combination with the MEG result provides the best</li> </ul>

	upper limit in the world on the decay: $3.1 \times 10^{-13}$ at 90% C.L.
	An observation of this decay would be an
	unambiguous sign of Physics beyond the Standard
	Wodel, while setting more stringent limits would be useful to constrain New Physics theoretical models
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	I am the coordinator of the MEGII Rome
	group (since 2012) and was Member of the MEGII
	Speaker Bureau (2019-2023);
	The Rome group responsibilities in MEGII are:
	• Drift Chamber (DC) HV system (up to 2023)
	• DC gas system;
	• DC wire tension measurement system used
	during the construction phase;
	• Larget position monitoring system which
	of the experiment
	The group participated to the R&D that led to the
	DC final design and in the wiring/assembling of the
	detector. In particular, we built one of the prototypes
	that demonstrated the achievable spatial resolutions.
	The group is also carrying on the search of the "X(17
	MeV)", possibly observed at Atomki, with the MEGII
	apparatus. The first result on this topic has been
	submitted (2024) to EPJC.
	My roles in MEG have been: • Coordinator of the MEG Rome group
	(since 2012);
	Coordinator of MEG MC production
	(2010-2013);
	• Co-author of the physics analysis ( $e^{-\gamma}$ time
	calibration, bayesian analysis);
	• <b>Responsible</b> for the Timing Counter (i.e. the scintillating timing detector) calibration
	<ul> <li>Responsible for the Timing Counter (i.e. the scintillating timing detector) calibration,</li> <li>Timing Counter commissioning:</li> </ul>
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Particle Physics Babar experiment (1999-2010)	<ul> <li>Responsible for the Timing Counter (i.e. the scintillating timing detector) calibration,</li> <li>Timing Counter commissioning;</li> <li>Shift coordination during data taking.</li> </ul> I was invited to talk about MEG(II) to various conferences [c17-c22; c24-c28; c30;c33]. The Babar detector took data in the years 1999-2008 at the high luminosity B-factory PEPII (Stanford Linear Accelerator Center). The Babar experiment studied (and discovered) the CP violation in the B meson system and several B decays (it also studied charm and tau decays). The Babar collaboration is an international collaboration of~600 physicists from several institutions around the word.
Particle Physics Babar experiment (1999-2010) Topic: CP Violation and B Decays	<ul> <li>Responsible for the Timing Counter (i.e. the scintillating timing detector) calibration,</li> <li>Timing Counter commissioning;</li> <li>Shift coordination during data taking.</li> </ul> I was invited to talk about MEG(II) to various conferences [c17-c22; c24-c28; c30;c33]. The Babar detector took data in the years 1999-2008 at the high luminosity B-factory PEPII (Stanford Linear Accelerator Center). The Babar experiment studied (and discovered) the CP violation in the B meson system and several B decays (it also studied charm and tau decays). The Babar collaboration is an international collaboration of~600 physicists from several institutions around the word. My roles/activities in the experiment were:
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Particle Physics Babar experiment (1999-2010) Topic: CP Violation and B Decays	<ul> <li>Responsible for the Timing Counter (i.e. the scintillating timing detector) calibration,</li> <li>Timing Counter commissioning;</li> <li>Shift coordination during data taking.</li> <li>I was invited to talk about MEG(II) to various conferences [c17-c22; c24-c28; c30;c33].</li> <li>The Babar detector took data in the years 1999-2008 at the high luminosity B-factory PEPII (Stanford Linear Accelerator Center). The Babar experiment studied (and discovered) the CP violation in the B meson system and several B decays (it also studied charm and tau decays). The Babar collaboration is an international collaboration of~600 physicists from several institutions around the word. My roles/activities in the experiment were:</li> <li>Coordinator of the sin2β working group. The angle β is one of the parameters that describe the CP with the physicists.</li> </ul>
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	<ul> <li>20% and the overall precision on the parameter was lowered to 5% (2006-2007);</li> <li>Coordinator of the flavour tagging working group. The tagging of the B flavour at the moment of the decay is a fundamental ingredient for time-dependent CP and mixing analyses (2005-2007);</li> <li>Babar representative at the Heavy Flavour Averaging Working Group (HFAG) for the B decays to open charm (2004-2009);</li> <li>Member of the panel for the coordination of the Physics analysis in Italy (2006-2008);</li> <li>Deputy Run Coordinator (2003);</li> <li>Primary author of the analyses of the CP violation in the B→D<sup>(*)</sup>π/ρ decays, related to the measurement of the sin(2β+γ) parameter;</li> <li>Primary author of the analyses of the B→D<sup>(*)</sup>s π/ρ rare decays. The decay B→Dsπ has been observed for the first time;</li> <li>Realization of the system for the quality control during LST production for the muon detector (2003);</li> <li>Production of new RPC for the muon detector (2001-2002);</li> <li>Member of "B decays to open charm" working group. I worked on the selection of the B sample used for flavour tagging (2000-2001);</li> <li>Co-author of the B mixing frequency measurement using dilepton events (2000-2001);</li> <li>Development of the drift chamber fast monitoring system, drift chamber fast monitoring s</li></ul>
Particle Physics DREAM experiment (2007-2013) Topic: R&D on New Calorimeters	<ul> <li>international collaboration (CERN, Italy, USA) which studies the possibility of improving significantly the resolution for hadron calorimeters</li> <li>by measuring the electromagnetic fraction event-by-event, through the detection of the Cerenkov light, produced only by the electromagnetic component of an hadronic shower. This technique is one of the option for the calorimeter of future high-energy circular collider experiments.</li> <li>My activities were: <ul> <li>Test beam with prototypes (scintillating crystals) at the H8 line at CERN;</li> </ul> </li> </ul>
	• <b>Primary author</b> of the paper on the separation of the Cerenkov and the

	<ul> <li>scintillation light in BGO and PWO crystals. (Invited talk at [c16]);</li> <li>Co-author of the paper that studied the possibility of separating the Cerenkov and the scintillation light in TeO<sub>2</sub> crystals, finalized to the discrimination of the backgrounds in double β decays experiments;</li> </ul>
	Since 2012 I also work to possible medical applications of techniques developed and/or used in the field of particle physics (detectors and analysis).
	I am <b>PI of the INFN unit of the project MUCCA</b> (Multi-disciplinary Use Cases for Convergent new Approaches to AI explainability) funded within the <b>call CHIST-ERA 2019</b> (Explainable Machine Learning Based Artificial Intelligence). The aim of this project is to develop algorithms to provide explanation of AI system in various use cases from high energy Physics and applied Physics. (invited talk at [c36]).
	I am part of the funded PRIN "RECENTRE" about motion correction in MRI with AI techniques and of the funded PNRR project PNRR-MAD-2022- 12376889 (I) in collaboration with IRCSS Santa Lucia, for the developed of Na-MRI based biomarkers for neurodegenerative diseases.
<ul> <li>Applied Physics to Medicine</li> <li>(2012 - ongoing)</li> <li>- ARPG group</li> <li>- NEPTUNE experiment</li> <li>Topic: hadrontherapy, radioguided</li> <li>surgery, medical image analysis</li> </ul>	In the field of the medical image analysis with AI algorithms I worked in collaboration with different clinical centers (Policlinico Umberto I, IFO, Sant'Andrea) to develop, using advanced machine learning algorithms, automated and personalized diagnostic and prognostic tools. These work led to various publications.
	I have been the <b>scientific responsible</b> (2020-2023) for the "Accordo di ricerca collaborativa" between INFN and the start-up Medlea for the project "prognosis and optimization of COVID-19 therapy" using biomechanical simulations and lung CT analysis. (invited talk at [c32]).
	I have been the <b>coordinator of the NEPTUNE</b> <b>Rome group</b> (2019-2022). NEPTUNE is an INFN approved experiment which studies the possible enhancement of the radiobiological effectiveness in proton therapy of cancer using nuclear reactions with borated and fluorinated tracers. The Rome group has the responsibility of developing clinical compatible imaging of tracers using 19F magnetic resonance, which is affected by low signal to noise ratio, through low noise RF coils, advanced signal processing and image analysis (invited talk at [c29]).

L I 1 20 a Si G fr U dd fc	<ul> <li>I participated to the funded project FILOBLU (2017-2020) for the development of an App which includes a machine-learning based analysis of the communications between patient and physician.</li> <li>Since 2012 I work in the Applied Radiation Physics Group, a group of physicists and bio-engineers from different institutions (INFN, Sapienza Università di Roma). I mainly contributed to the design of a dose profiler detector to be used for monitoring of hadron therapy of cancer as: <ul> <li>Co-author of the measurements of particle fluxes escaping from PMMA phantoms hit by a heavy ion beams at therapeutic energies. The knowledge of the fluxes that come out of the patient is necessary for the design of the dose profiler that exploits this radiation;</li> <li>Primary author of the optimization of the dose profiler design and performance study using simulation. The detector is currently under test CNAO (invited talk at [c23]).</li> </ul> </li> </ul>
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#### Part XIII - Talks at International Conferences

c37) 2024 - SUSY 2024 (Madrid, Spain). invited talk on "A search of  $\mu \rightarrow e\gamma$  with the first MEG II dataset"

**c36)** 2024 - From Physics to Medicine: XAI workshop (University of Milano Bicocca), invited talk on " The MUCCA (Multi-disciplinary Use Cases for Convergent new Approaches to AI explainability"

c35) 2023- Muon4Future (Venezia, Italy), invited talk on "Future  $\mu \rightarrow e\gamma$  experiments".

- c34) 2023-Multimodal approach to biomedical application (Roma, Italy), invited talk on "Improvements on 19F MRI imaging".
- c33) 2022- DIS2022: XXIX International Workshop on Deep-Inelastic Scattering and Related subjects, invited talk on "Status and prospect of New Physics searches at MEGII".
- c32) 2020- CoViD-19: Inflammation and Molecular Imaging (ISS, Roma, Italy), invited talk on "COVID-19 therapy optimization by AI-driven biomechanical simulations".
- c31) 2019- Incontro sulle Nuove Tecnologie applicate alla Medicina, Istituto Superiore di Sanità (Roma, Italy), invited talk on "The (possible) role of INFN in national-wide projects of AI-based applications to medical data".
- c30) 2019- 105th Congresso Nazionale della Società Italiana di Fisica (L'Aquila, Italy), invited talk on "Status and prospects of the MEG-II experiment at PSI".

- c29) 2019- Advanced Physics for Medicine (Roma, Italy), invited talk on "Development of 19 Magnetic Resonance Imaging".
- **c28**) 2019- XXV International Symposium PASCOS (Manchester, UK), invited talk on "Status and prospects of charged lepton flavor violation searches with the MEG-II experiment".
- c27) 2018- New Trends In High Energy Physics (Budva, Montenegro), "Status and prospects of charged lepton flavor violation searches with the MEG-II experiment".
- c26) 2018- 26th International Conference on Supersymmetry and Unification of Fundamental Interactions, (Barcellona, Spain), "The quest for  $\mu \rightarrow e$  and its experimental limiting factors at future high intensity muon beams".
- c25) 2017- 19th International Workshop on Neutrinos from Accelerators (Uppsala, Sweden), invited talk on "Status and prospects of charged lepton flavor violation searches with the MEG-II experiment".
- **c24)** 2016 2nd International Conference on Charged Lepton Flavor Violation (Charlottesville, USA) invited talk on "**Final result of the MEG experiment and prospects for μ->ey searches**".
- c23) 2015 53th International Winter Meeting on Nuclear Physics (Bormio, Italy) invited talk on ``A novel dual- mode tracking device for online dose monitoring in hadron therapy''.
- **c22)** 2014 4th Workshop on Flavour Symmetries and Consequences in Accelerators and Technology, (Brighton, UK), invited talk on **``Results and prospects on MEG experiment''**.
- c21) 2013 3rd Workshop on the Physics of Fundamental Symmetries and Interactions at Low Energies and the Precision Frontier (Villigen, Switzerland), invited talk on "Searching for the lepton flavour violating decay  $\mu \rightarrow e \gamma$  with the MEG experiment: results and perspectives".
- **c20)** 2012 The XIth International Conference on Heavy Quarks and Leptons (Praga, Czech Rep.), invited talk on **``Searches of lepton flavour violation in muon decays''**.
- c19) 2011 Università di Roma ``La Sapienza", Particle Physics seminar on ``Results of the MEG experiment ''.
- c18) 2010 8th Flavor Physics and CP violation 2010 (Torino, Italy) invited talk on "Lepton Flavor Violation in  $\mu \rightarrow e \gamma$ ".
- c17) 2009 Incontri di Fisica delle Alte Energie, VIII Edizione (Bari, Italy) invited talk on ``Status of the MEG experiment''.
- c16) 2008 XIII International Conference on Calorimetry in High Energy Physics (Pavia, Italy), invited talk on ``Separation of PbWO4 and BGO signals into Cerenkov and scintillation component''.
- c15) 2008 Les Rencontres de Physique de la Vallee d'Aoste, LaThuile, invited talk on **``Measurement** of CKM angles at the B-factories''.
- **c13)** 2005 HEP2005 International Europhysics Conference on High Energy Physics EPS (Lisbona, Portugal) invited talk on "Measurements of sin(2β+γ) with BaBar".

- c12) 2005 3rd Workshop on Unitarity Triangle (San Diego, USA), invited talk on "  $\sin(2\beta+\gamma)$  constraint from CP asymmetries in B<sup>0</sup> to  $D^{(*)}\pi/\rho$  decays".
- c11) 2005 Secondo incontro sulla Fisica del Beauty (Bari, Italy), invited talk on ``Status of the unitary triangle analysis at the B factories''.
- c10) 2003 3rd Meeting of the EuroGDR Supersymmetry (Parigi, France), invited talk on "B factory status and perspectives".
- **c9**) 2003 Università di Roma La Sapienza, Particle Physics seminar on **``The CKM angle** γ: recent results and future perspectives with the BaBar detector''.
- c8) 2002 Società Italiana di Fisica, Congresso Nazionale 2002 (Alghero, Italy), talk on "Measurement of  $sin(2\beta+\gamma)$  with the decays B<sup>0</sup> to D<sup>(\*)</sup> $\pi$  at Babar".
- **c7**) 2002 XIV Incontro Fisica delle Alte Energie (Parma, Italy), invited talk on **``Measurement of the CKM angle** γ **at the B factories''**.
- **c6)** 2002 31st International Conference on High Energy Physics (Amsterdam, Netherlands), invited talk on **``Measurement of B<sup>0</sup> mixing with Babar''**.
- **c5)** 2002 American Physical Society, Albuquerque (New Mexico, USA), talk on **``Measurement of branching ratio of B0 to Dsπ with BaBar''**.
- c4) 2002 American Physical Society, Albuquerque (New Mexico, USA), talk on "Feasibility study on measurement of  $sin(2\beta+\gamma)$  with the decays B<sup>0</sup> to D<sup>(\*)</sup> $\pi$  at Babar".
- c3) 2002 American Physical Society, Albuquerque (New Mexico, USA), talk on **``Measurement of CP/T** violation with dilepton events with BaBar''.
- c2) 2002 Università di Roma ``La Sapienza", Particle Physics seminar on ``Misure di violazione di CP a BaBar''.
- c1) 2000 Società Italiana di Fisica, Congresso Nazionale 2000 (Palermo, Italy), talk on **"Branching ratio** measurement of B<sup>0</sup> in charmonium final states at BaBar".

#### Part XIV- Summary of Scientific Achievements

#### **XIVA - Overall Production**

Product type	Number	Database	S	tart	End
Papers (internationals)	541	Scopus		2001	2024

Indicator

Database

Total Impact Factor	2765
Total Citations	28906
Average Citations per Product	53.4
Hirsch (H) index	88
Average Impact Factor	5.2