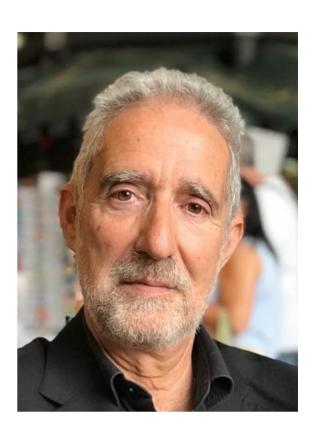
# **Europass Curriculum Vitae**



(39) 3335803855

Mobile:

## Personal information

Surname(s) / First name(s) Toni (Antonio) BARONCELLI

Address(es) Via Salvatore d'Amelio 14 Roma, Italy

Telephone(s) (39-06) 57337050 Fax(es) (39-06) 57337049

Fax(es) (39-06) 57337049

E-mail Toni.Baroncelli@roma3.infn.it

Nationality Italian

Date of birth 24.10.1949

Gender Male

Work experience

Dates | 2016 – Ongoing INFN Senior Associate

2001 - 2016 'Dirigente di ricerca'

Occupation or position held

#### Main activities and responsibilities

## Atlas experiment at CERN, muon system, management.

- Chair of the Muon Institute Board. Elected in April 2015, mandate ending in end April 2019.
- Member of the ATLAS Speakers Committee 2009-2012 (3y), 2014 (1y), 2017 April-September (6months).
- Member of the Micro-Megas coordination group since January 2016. Responsible for the "procurement"
- Member of the Scrutiny Group for M&O expenses for years 2014, 2015, 2016, 2017,2018
- Member of the Panel for the Muon Upgrade of Phase 2, 2016
- Institute Representative of the Roma TRE group (2011-2014)

Atlas experiment at CERN, muon system, Micro-Megas. Participation in the production of 32 "SM1" modules for the NSW both in RM3 and LNF.

## Atlas experiment at CERN, analysis & related work

2017 - ongoing contribution to the H associated production

2016 - ongoing Chair of the Editorial Board of the DBL - VV llgg and nngg 2016 conf.note 2015-2017 Atlas experiment at CERN, analysis work. Analysis/Editor of the HSG8 ttH Multileptons channel. Use of kinematical reconstruction methods in background reduction.

2013-2015 Atlas experiment at CERN, analysis work. Analysis/Editor of the HSG3 Main Associated

2011 Atlas experiment at CERN, analysis work. Analysis/Contact Editor of the "Inclusive electron and muon cross section.

## Atlas experiment at CERN, muon system, MDT chambers.

- Participation in the dressing and cosmic test of MDT chambers produced in Rome.
- Analysis of cosmics data, temperature effects, slewing corrections.
- Use of cosmics in alignment procedure of MDT multilayers.
- Development of code for the measurement of rt-relation and space resolution of muon chambers.
- Participation in H8 data taking campaign.
- Analysis of H8 data and combination of results on calibration, alignment and sagitta resolution in one paper.
- Participation in the setup of a calibration site in Roma1

## Atlas experiment at CERN, analysis work, Inclusive electron and muon cross section

- Analysis code development.
- Optimization of selection criteria.
- Analysis of results.
- Contact editor

## Atlas experiment at CERN, analysis work, Higgs search, VH channel

- Analysis code development.
- Optimization of selection criteria.
- Analysis of results.
- Definition of control regions and calculation of scale factors

## Atlas experiment at CERN, analysis work, Higgs search, ttH channel

- Initial study of a possible use of MVA techniques in the search for ttH to multileptons
- Study of fake-leptons background
- Initial study of kinematical reconstruction of ttH events

## Atlas experiment at CERN, Editorial Board Member

- W and Z cross section at 5 TeV, EB chair (2018)
- Di-boson search in Ilgg and vvgg final states EB chair 2016
- PR Dilepton ttbar charge asymmetry 7 TeV (2013)
- Muon performance (2012)

## Atlas experiment at CERN, Micro Megas Chambers (MM)

- Study of mesh tensioning techniques. Realization of small size prototypes. Study of the tension stability versus time
- Development of the real size tooling for the MM mesh tensioning.

	Study of MM cleaning techniques. Contribution to the definition of cleaning procedures
Dates	1996 – Ongoing
Occupation or position held	'Chief Editor' of the Italian scientific policy Review 'Analysis' (www.analysis-online.net)
Main activities and responsibilities	Overall coordination of the Review
	Definition of the scientific policy.
	<ul> <li>Identification of possible topics for the different issues.</li> <li>Contact with authors.</li> </ul>
	Contact with the Property of the Review.
	Chair of the Editorial Board Review meetings.
Name and address of annularion	Review economic handling.  Intitute Nationals di Fision Nucleare.
Name and address of employer	Istituto Nazionale di Fisica Nucleare
Type of business or sector	Research, detector construction, detector data analysis
Dates	'Abilitazione' achieved as Full University Professor, Period 2014 - 2020
Occupation or position held	Full Italian University Professor
Dates	2007 - ongoing
Occupation or position held	Lecturer of PHD courses at the Roma TRE University
Main activities and responsibilities	Course on "Experimental Physics at Hadronic Colliders"
Name and address of employer	Mathematics and Physics Department University of Roma TRE
Type of business or sector	Teaching
D.	4000 0004
Dates	1986 – 2001
Occupation or position held	'Dirigente di ricerca'
Main activities and responsibilities	<ul><li>DELPHI experiment at CERN.</li><li>Hadron calorimeter simulation code.</li></ul>
	Combined calorimetry analysis code.
	Coordination of the 'b-lifetime' analysis group.
	<ul> <li>Analysis of 'b-asimmetry' using jet charge.</li> <li>Analysis of Zγ* events</li> </ul>
	TGC anomalous couplings.
	Member of the DELPHI Collaboration Board
Name and address of employer	Istituto Nazionale di Fisica Nucleare
Type of business or sector	Research, detector construction, detector data analysis, physics data analysis
Dates	1978 – 1979
Occupation or position held	'CERN fellow'
Main activities and responsibilities	<ul> <li>CHARM experiment at CERN</li> <li>Search for fractionally charged particles</li> </ul>
	Analysis of same sign and opposite sign di-muon events
Name and address of employer	CERN
Type of business or sector	Physics analysis
Dates	1977 – 1985

Occupation or position held 'Ricercatore', 'Primo ricercatore' (since 1985)

CHARM experiment at CERN Main activities and responsibilities

Participation in the detector project

- Development for the simulation of hadron and electro-magnetic showers
- Analysis of same sign and opposite sign di-muon events

Name and address of employer

Istituto Nazionale di Fisica Nucleare

Type of business or sector Research, Detector analysis, Detector simulation, Physics analysis

Dates

1973 - 1976

Fellow

Occupation or position held Main activities and responsibilities

Experiment for the measurement of pp total cross section at the CERN ISR

Participation in the data analysis

Name and address of employer Istituto Nazionale di Fisica Nucleare

Type of business or sector Research, Physics analysis

**Education and training** 

Dates 1968 - 1972

Title of qualification awarded Laurea

**Physics** 

Principal subjects/occupational skills covered

Particle and Nuclear Physics

Name and type of organisation

University of Rome "La Sapienza", Italy

providing education and training

Dates 1973 - 1974

Title of qualification awarded

Scuola di Perfezionamento in Fisica

Principal subjects/occupational skills

**Physics** 

covered

Particle and Nuclear Physics

Name and type of organisation providing education and training University of Rome "La Sapienza", Italy

Social skills and competences

Team work - I have experience in team leading

Communication skills - I have outstanding communication skills

Organizational skills and competences

I have excellent experience in the coordination of multi-individuals projects

I have skills acquired in the organization and chairing of working meetings and production of reports by several authors

I have outstanding capacity of working independently and to take over responsibility

Mass media - Chief Editor of Italian Science Policy Review 'Analysis' (www.analysis-online.it)

Other skills and competences

Bass in a baroque music choir