

Plan S – FAQ's



S. Bianco R.Barbera P.Lubrano M.Maggi
D.Menaste L.Patrizii INFN - Plan S @ SEBD
Villasimius 20200622

J.M.W. Turner

2017 EPR

Stefano Bianco, INFN researcher and member of cOAlition S Expert Group



Plan S in the National Institute for Nuclear Physics

S.Bianco R.Barbera M.Maggi

D.Menasce L.Patrizii

A.Masiero (eo)

INFN Open Access Working Group

P.Lubrano

INFN Research Assessment Working Group

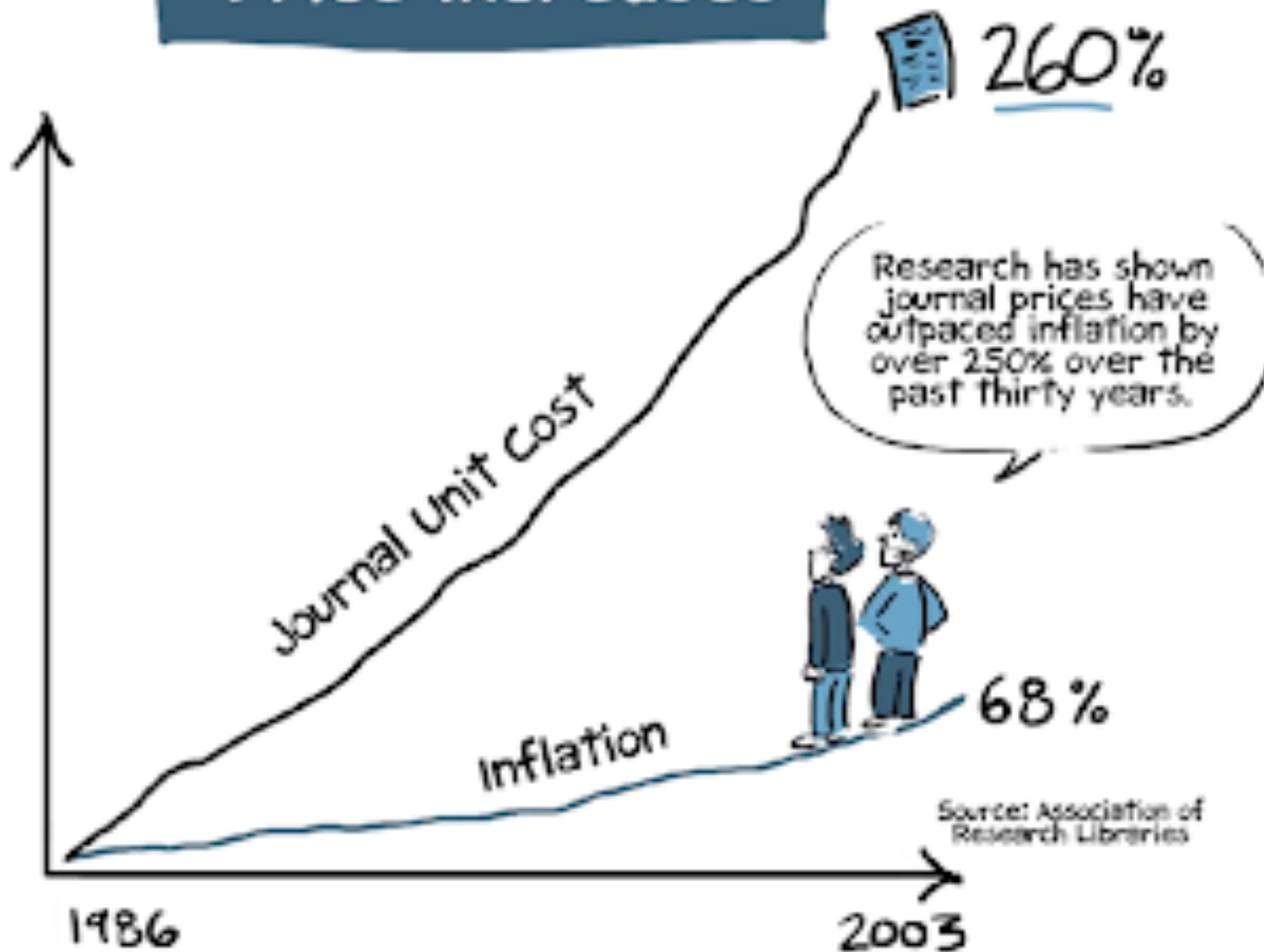
info: stefano.bianco@lnf.infn.it
oa@lists.infn.it



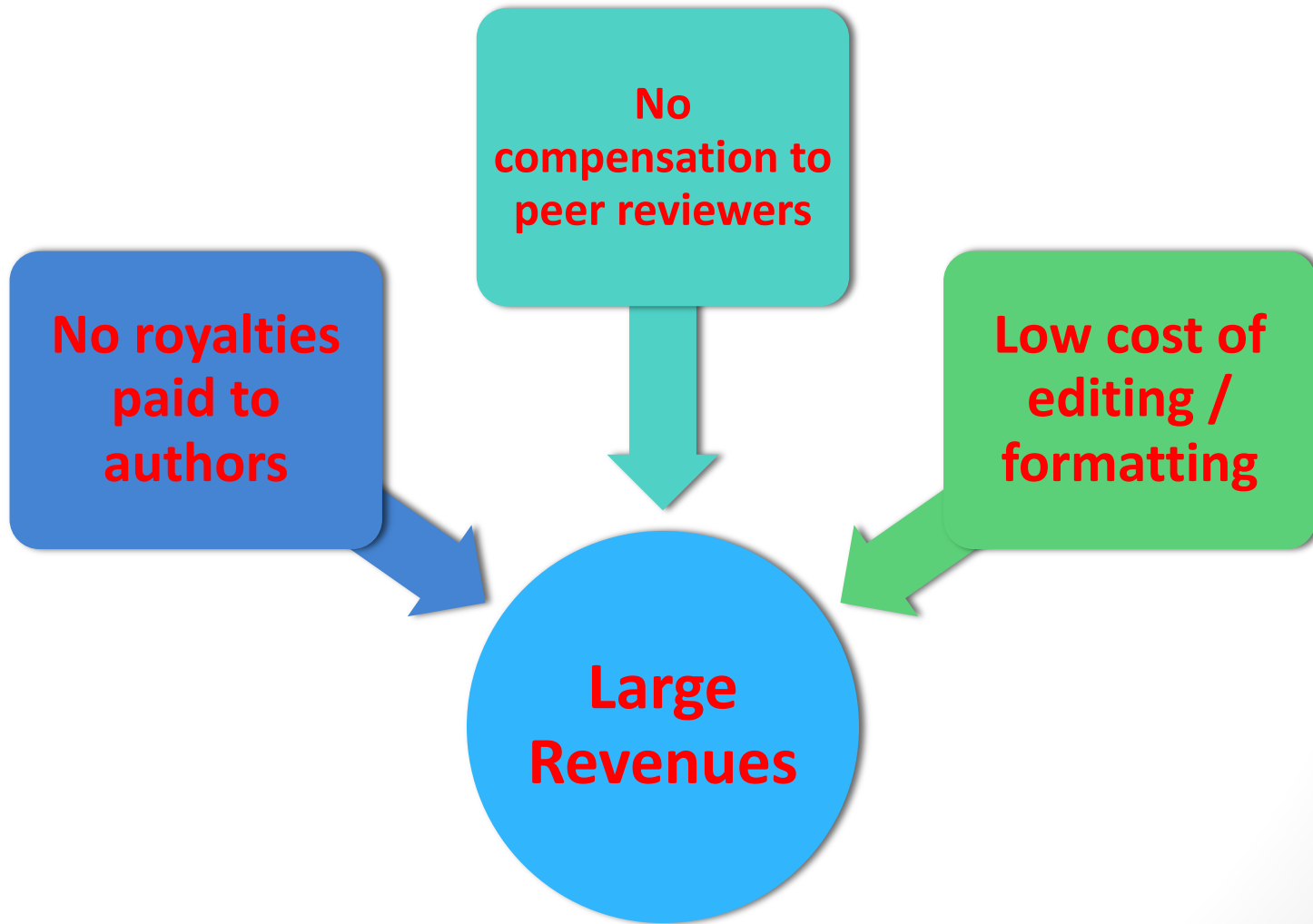
Open Access

- All results from publicly funded research must be immediately and freely available to the taxpayer that has funded it.

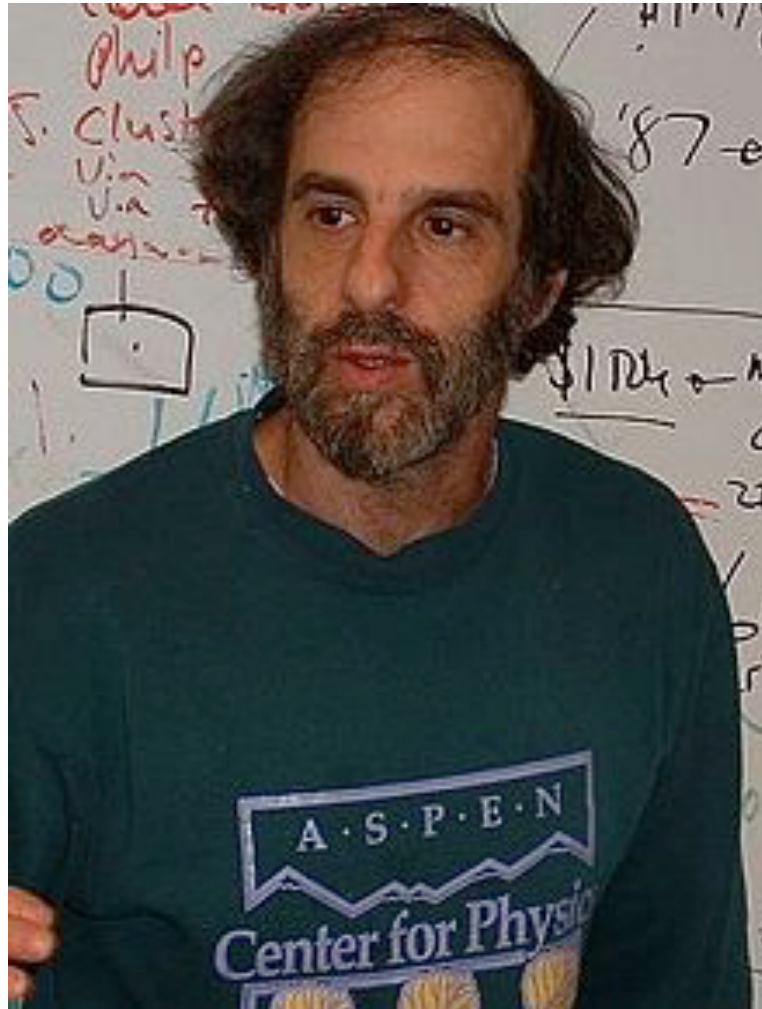
Price Increases



Top 5 commercial publishers



1991 Paul Ginsparg e arXiv



6 agosto 1991 – nascita di www al CERN



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D. Menascè L. Patrizii INFN - Plan S @ SEBD
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Consiglio Nazionale delle Ricerche
Biblioteca d'Area di Bologna

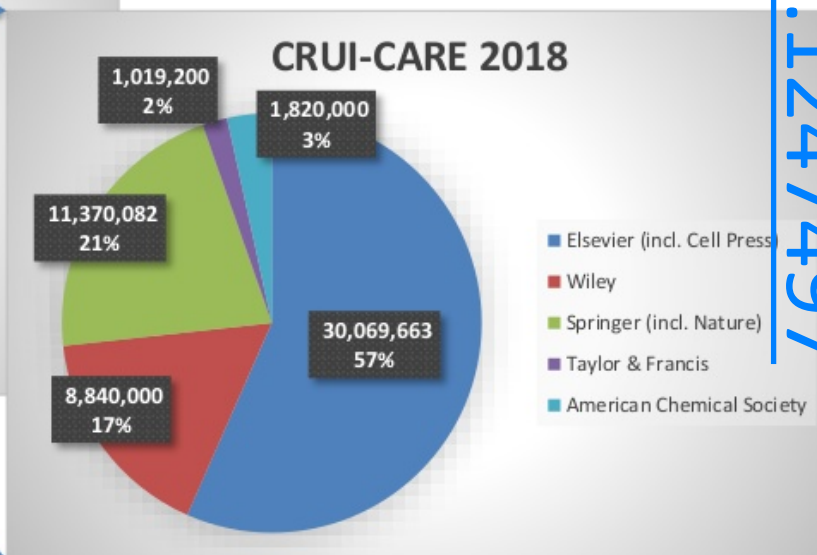
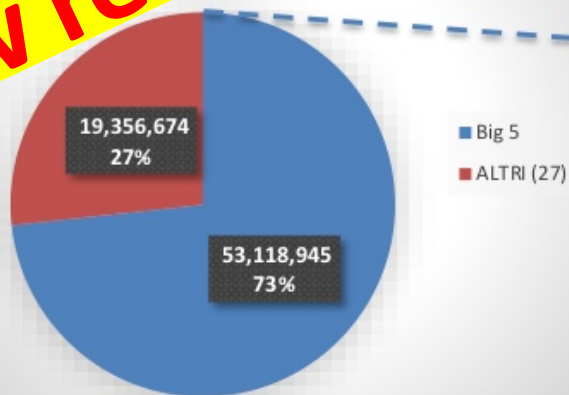
Quanto costa l'accesso a letteratura scientifica in Italia?

CRUI – Amm. Contratti Pubblici
<https://www.crui.it/contratti-pubblici.html>

**subscriptions in 1 year = 1450
new researchers**

2018
totale = € 72.475.619

~ 1.450 nuovi ricercatori



Costi di APC non inclusi nelle contrattazioni

[10.5281/zenodo.12247497](https://zenodo.org/doi/10.5281/zenodo.12247497)

Ref: S. Mangiaracina

S. Bianco R. Barbera P. Lubrano M. Maggi
D. Menasce L. Patrizii INFN - Plan S @ SEBD
Villasimius 20200622



Green Open Access

"Subscription" MODEL

- *Publish preprint to OA repository*
- *Submit to subscription journal, get it accepted*
- *Wait 0/6/12 months before submitting post-peer review version "postprint/AAM" to OA repository*

Gold Open Access

"Article Processing Costs" MODEL

- *Pay Article Processing Costs (APC) and publish OA*

Hybrid with Double Dipping

- *Buy subscription...*
- *...and also pay APC*



Impact Factor

$$IF_{y,2} = \frac{Citazioni_{y-1} + Citazioni_{y-2}}{Pubblicazioni_{y-1} + Pubblicazioni_{y-2}}$$

- New journal has IF=0 for two years
- IF Index is subject to problems (self citations, negative citations etc.)

Restrictive law on copyright will not guarantee free posting of AAM/postprint unless contractual.

Research assessment based on $IF_{y,5}$ and Citations

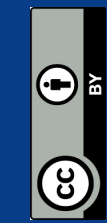
Authors publish on journals with high IF

New, quality journals cannot have an IF before 2/5 years

Peer review provided by (unpaid) scientists

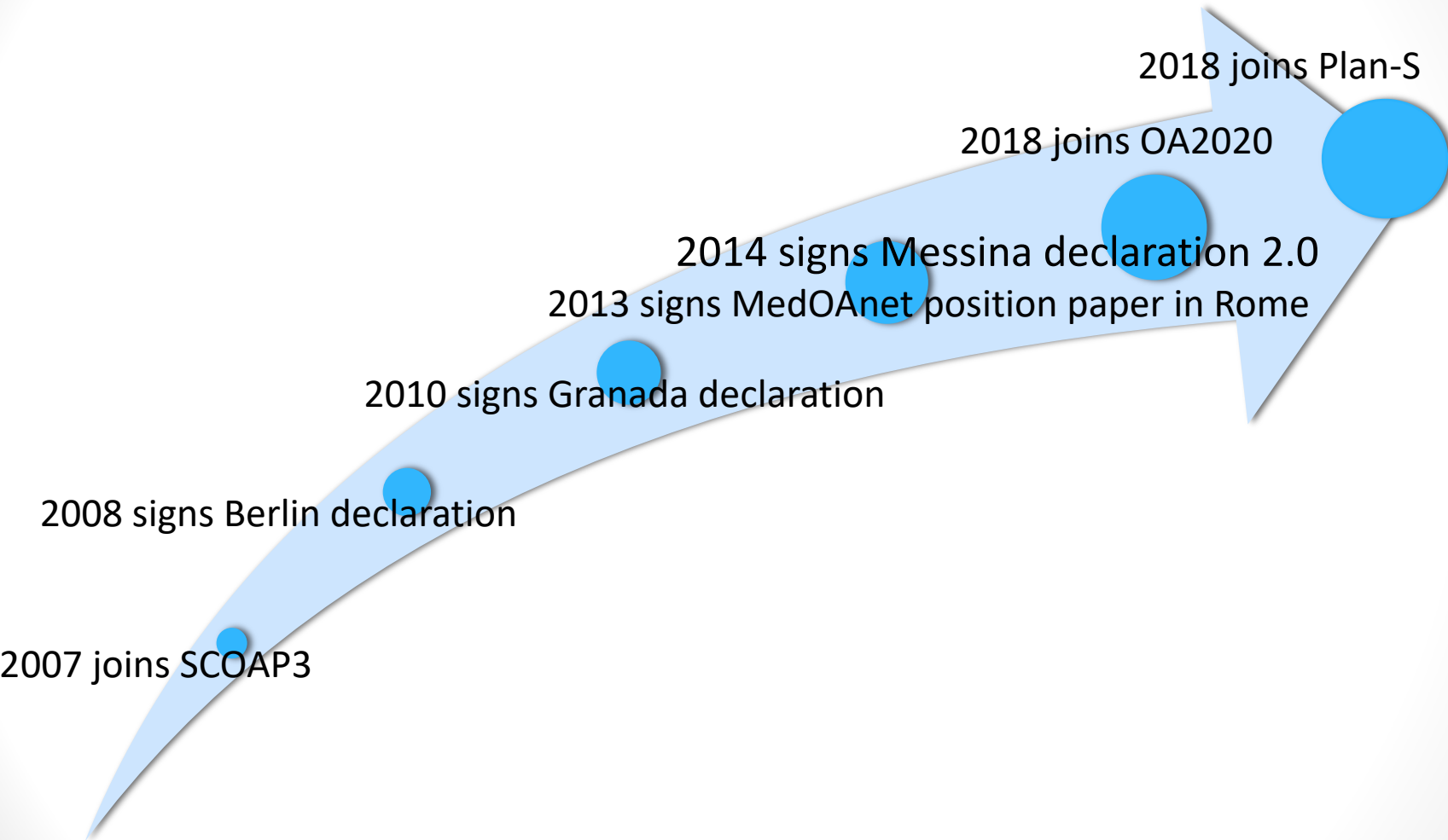
ANVUR (Research assessment govern. agency) considers only journals indexed on WOS and SCOPUS

Minimal editing is provided by publishers



- Establishing Open Access practices is a challenge
- The evaluation of research (careers, fundings, etc) is entwined with bibliometric criteria, particularly Impact Factor (IF) in STEM disciplines
- Commercial databases are used for governmental research assessment

Infn e Open Access



the Frascati institutional repository
contains preprints dating back **1954**
openaccessrepository.it

LNF - 54/15
26. 3. 1954.

G. Salvini: PROPOSAL OF A SYNCHROTRON WITH A DOUBLE
VACUUM CHAMBER.

(v. 54/47)



4 Settembre 2018

**11 Istituzioni Finanziatrici della Ricerca
lanciano Plan S**



National funders



Charitable and international funders



European funders



Plan S Principles (simplified)

- ⦿ We are not going to pay to publish on double dipping journals
- ⦿ We support self archiving and zero-embargo green OA
- ⦿ We are not going to use Impact Factor for evaluation of research
- ⦿ We are going to apply the Plan S principles on new projects starting after January 1st, 2021

May 31st, 2019

Plan S – Implementation Guidance The Three Roads



Open Access publishing venues (journals or platforms)

Authors publish in an Open Access journal or on an Open Access platform.

cOAlition S funders will financially support publication fees.

1

gold OA

Subscription venues (repository route)

Authors publish in a subscription journal and make either the final published version (Version of Record (VoR)) or the Author's Accepted Manuscript (AAM) openly available in a repository.

cOAlition S funders will not financially support 'hybrid' Open Access publication fees in subscription venues.

2

green OA

Transition of subscription venues (transformative arrangements)

Authors publish Open Access in a subscription journal under a transformative arrangement.

cOAlition S funders can contribute financially to Open Access publishing under transformative arrangements.

3

hybrid in transition

Author's Accepted Manuscript

08y [physics.ins-det] 26 Dec 2010

A new approach in modeling the behavior of RPC detectors

L. Benussi^a, S. Bianco^a, S. Colafranceschi^{a,b,c,1}, F.L. Fabbri^a, M. Giardoni^a, L. Passamonti^a,
D. Piccolo^a, D. Pierluigi^a, A. Russo^a, G. Saviano^{a,b}, S. Buontempo^d, A. Cimmino^{d,e},
M. de Gruttola^{d,g}, F. Fabozzi^d, A.O.M. Iorio^{d,g}, L. Lista^d, P. Paol
D. Pagano^f, S.P. Ratti^f, A. Vicini^f, P. Vitulo^f, C. Viviani^f, A. Sha

^aINFN Laboratori Nazionali di Frascati, Via E. Fermi 40, I-00044

^bSapienza Università degli Studi di Roma "La Sapienza", Piazzale A.

^cCERN CH-1211 Genève 23 F-01631 Switzerland

^dINFN Sezione di Napoli, Complesso Universitario di Monte Sant'Angelo, edifi

^eUniversità di Napoli Federico II, Complesso Universitario di Monte Sant'Angelo,

^fINFN Sezione di Pavia and Università degli studi di Pavia, Via Bassi 6,

Abstract

The behavior of RPC detectors is highly sensitive to environmental variables. A novel approach of RPC detectors in a variety of experimental conditions. The algorithm, based on Artificial Neural Networks, has been developed and tested on the CMS RPC gas gain monitoring system during commissioning.

<http://arxiv.org/abs/1012.5508v1>

Key words: RPC, CMS, Neural Network, muon detectors, HEP

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A new approach in modeling the behavior of RPC detectors

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^a INFN Laboratori Nazionali di Frascati, Via E. Fermi 40, I-00044 Frascati, Italy
^b Sapienza Università degli Studi di Roma "La Sapienza", Piazzale A. Moro, Roma, Italy
^c CERN CH-1211 Genève 23, F-01631, Switzerland
^d INFN Sezione di Napoli, Complesso Universitario di Monte Sant'Angelo, edificio 6, 80132 Napoli, Italy
^e Università di Napoli Federico II, Complesso Universitario di Monte Sant'Angelo, edificio 6, 80132 Napoli, Italy
^f INFN Sezione di Pavia and Università degli studi di Pavia, Via Bassi 6, 27100 Pavia, Italy

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ABSTRACT
The behavior of RPC detectors is highly sensitive to environmental variables. A novel approach is presented to model the behavior of RPC detectors in a variety of experimental conditions. The algorithm, based on Artificial Neural Networks, has been developed and tested on the CMS RPC gas gain monitoring system during commissioning.
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1. Introduction
Resistive Plate Chamber (RPC) detectors [1] are widely used in HEP experiments for muon detection and triggering at high-energy, high-luminosity hadron colliders [2,3], in astroparticle physics experiments for the detection of extended air showers [4], as well as in medical and imaging applications [5]. At the LHC, the muon system of the CMS experiment [6] relies on drift tubes, cathode strip chambers and RPCs [7].
In this paper a new approach is proposed to model the behavior of RPC detectors in a variety of experimental conditions. The algorithm, based on Artificial Neural Networks (ANN), allows one to model the behavior of RPC detectors in a set of variables, once each variable is available for training to the ANN. At present, the available environmental variables (temperature, atmospheric pressure p and relative humidity H) have been considered. Further studies including radiation dose D will be the subject of a forthcoming paper. In a preliminary phase we trained a neural network with just one variable and we found out, as expected, that the predictions are improved after adding more variables into the network. The agreement found between data and prediction has to be considered a preliminary evaluation of the validity of the algorithm, since it also depends on the presence of unknown variables not considered for training.

The data for this study have been collected utilizing the gas gain monitoring (GGM) system [9–11] of the CMS RPC muon detector during the commissioning with cosmic rays in the ISR test area at CERN.
The GGM system is composed of the same type of RPC used in the CMS detector (2 mm-thick Bakelite gaps) but of smaller size (50 × 50 cm²). Twelve gaps are arranged in a stack. The trigger is provided by four out of 12 gaps of the stack, while the remaining eight gaps are used to monitor the working point by means of a secondary telescope based on RPCs.
The RPCs and gaps have been modeled with a Geant4-based simulation. The data for training and testing were obtained by means of a set of variables, once each variable is available for training to the ANN. At present, the available environmental variables (temperature, atmospheric pressure p and relative humidity H) have been considered. Further studies including radiation dose D will be the subject of a forthcoming paper. In a preliminary phase we trained a neural network with just one variable and we found out, as expected, that the predictions are improved after adding more variables into the network. The agreement found between data and prediction has to be considered a preliminary evaluation of the validity of the algorithm, since it also depends on the presence of unknown variables not considered for training.

2. The Artificial Neural Network simulation code
An Artificial Neural Network (ANN) is an information processing paradigm that is inspired by the way biological nervous systems, such as the brain, process information [12]. The most

Version Of Record

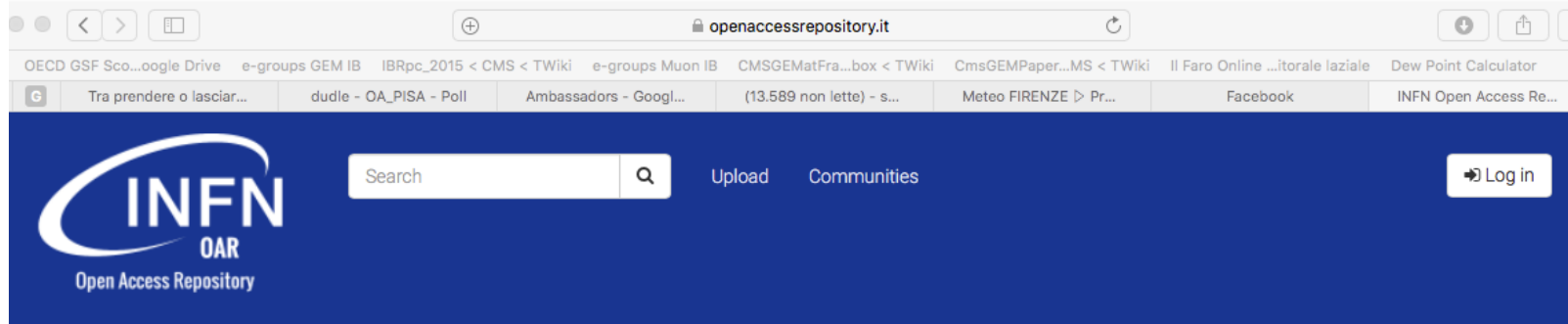
*Corresponding author at: CERN CH-1211 Genève 23, F-01631, Switzerland.
E-mail address: scolafranceschi@cern.ch (S. Colafranceschi).

A new Institutional repository

- Pilot being discussed for approval in INFN
 - **openaccessrepository.it**
 - INVENIO3 + ZENODO
 - Open data-ready
 - In collaboration with CNR(P.Manghi, D.Castelli et al.)
- Try it, free DOI when depositing your content

Openaccessrepository.it

Try it, free DOI when depositing your content



Latest entries

March 10, 2010 (v1) Presentation Open Access

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Fargetta, Marco; Scardaci, Diego; Ciuffo, Leandro N.

Evaluate the status of several EGEE-like infrastructures outside of Europe

Uploaded on March 18, 2019

View

November 24, 2015 Book section Open Access

MEASUREMENT OF FORWARD AND BACKWARD MEAN CHARGED-PARTICLE MULTIPLICITIES IN HIGH-ENERGY (pp) SOFT INTERACTIONS AND COMPARISON WITH HIGH-ENERGY NEUTRINO AND ANTINEUTRINO DEEP INELASTIC SCATTERING

M. BASILE; G. BONVICINI; G. CARA ROMEO; L. CIFARELLI; A. CONTIN; M. CURATOLO; G. D'ALI; C. DEL PAPA; B. ESPOSITO; P. GIUSTI; T. MASSAM; R. NANIA; G. SARTORELLI; G. SUSINNO; L. VOTANO; A. ZICHICHI

Uploaded on March 7, 2019

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View

INFN Open Access Repository at a glance

- **Research. Shared.** – all research outputs from across all domains of INFN research are welcome!
- **Findable. Citeable. Discoverable.** – each upload gets a Digital Object Identifier (DOI) to make it easily and uniquely citeable. You can (automatically) link your research outputs to your ORCID profile.
- **Communities** – create and curate your own community for a workshop, project, Division, Laboratory, service, journal, etc. into which you can accept or reject uploads.
- **Funding** – you can associate an upload to the grant that has funded the work.
- **Flexible licensing** – you can choose among several licenses. You can also upload closed or embargoed research outputs.

Tweets by @INFN

Q: Which model is supported by Plan S ? (Subscriptions/APC/etc)

A. Plan S does not support any model in particular; funders will not fund publications of papers on double dipping journals.

Q: Is APC publishing the only Plan S - compliant road ?

A. No. Three conformal roads: 1) gold OA; 2) green OA with zero embargo deposit of AAM; 3) hybrid with *transformative agreement*

Q: Does Plan S support green OA ?

(self-archiving on repositories)

A. Yes it does, conformity road #2



Q: Does Plan S request authors to pay APC on their research funds ?

A.No. The *author pays* model is explicitly condemned. Funders commit to redirect subscription monies without using research monies.

Q: Does Plan S consider no-profit / no-loss scientific societies equal to commercial publishers ?

A.No. Scientific societies are recognised a special role. Thick report prepared to help ease the process

<https://doi.org/10.6084/m9.figshare.c.4561397>



In conclusion

- Plan S is a disruptive, provocative action aimed to let us emerge from the OA swamp
 - **SAY NO** to any specific economic model, double-dipping, author pays, journal IF
 - **SAY YES** to green road, **zero-embargo self-archiving**, transformative agreements
- New INFN institutional repository in pilot mode free to use
 - **openaccessrepository.it**
- Further readings on Plan S:
 - S.Bianco, L.Patrizii, Plan S e le società scientifiche – una rivoluzione per l'Open Access?
<https://doi.org/10.15161/oar.it/23538>

Spare slides