

## **Francesco Riggi**

Elenco delle pubblicazioni scientifiche recenti (2017-2020)

## Publicazioni 2017

### 2017-A1

P.La Rocca, D.Riggi and F.Riggi  
*Time series analysis of cosmic ray data*,  
in *Advances in Engineering Research* Vol. 16,  
Nova Publisher 2017, ISBN: 978-1-53610-519-3,

### 2017-A2

V.Abelev et al. (The ALICE Collaboration)  
*J/Psi suppression at forward rapidity in Pb-Pb collisions at 5.02 TeV*  
*Physics Letters* **B766**(2017)212  
dx.doi.org/10.1016/j.physletb.2016.12.064 WOS:000396438300031

### 2017-A3

V.Abelev et al. (The ALICE Collaboration)  
*Charged particle multiplicity in proton-proton collisions at  $\sqrt{s}=0.9$  to 8 TeV*  
*European Physical Journal* **C77**(2017)33  
doi:10.1140/epjc/s10052-016-4571-1 WOS:000399713500003

### 2017-A4

M.Abbrescia et al. (The EEE Collaboration)  
*Operation and performance of the EEE network array for the detection of cosmic rays*  
*Proc. Vienna, Nuclear Instruments and Methods* **A845** (2017)383  
<http://dx.doi.org/10.1016/j.nima.2016.05.112> WOS:000394556300093

### 2017-A5

V.Antonuccio et al. (The Muon Portal Collaboration)  
*The Muon Portal Project: design and construction of a scanning portal based on muon tomography*  
*Proc. Vienna, Nuclear Instruments and Methods* **A845** (2017)322  
<http://dx.doi.org/10.1016/j.nima.2016.05.006> WOS:000394556300079

### 2017-A6

V.Abelev et al. (The ALICE Collaboration)  
*Phi-meson production at forward rapidity in p-Pb collisions at 5.02 TeV and pp collisions at 2.76 TeV*  
*Physics Letters* **B768**(2017)203  
dx.doi.org/10.1016/j.physletb.2017.01.074 WOS:000400677700025

### 2017-A7

V.Abelev et al. (The ALICE Collaboration)  
*W and Z boson production in p-Pb collisions at 5.02 TeV*  
*JHEP* **02**(2017)077  
doi:10.1007/JHEP02(2017)077 WOS:000394421700001

**2017-A8**

V.Abelev et al. (The ALICE Collaboration)  
*Determination of the event collision time with the ALICE detector at LHC*  
EPJPlus **132**(2017)99  
DOI 10.1140/epjp/i2017-11279-1

**2017-A9**

V.Abelev et al. (The ALICE Collaboration)  
*Enhanced production of multi-strange hadrons in high multiplicity pp collisions*  
Nature Physics **13**(2017)535  
doi:10.1038/nphys4111

**2017-A10**

V.Abelev et al. (The ALICE Collaboration)  
*Production of muons from heavy flavor hadron decays in p-Pb collisions at 5.02 TeV*  
Physics Letters **B770**(2017)459  
<http://doi.org/10.1016/j.physletb.2017.03.049>

**2017-A11**

V.Abelev et al. (The ALICE Collaboration)  
*Flow dominance and factorization of transverse momentum correlations in Pb-Pb at LHC*  
Physical Review Letters **118** (2017)162302  
DOI: 10.1103/PhysRevLett.118.162302 WOS:000399819100006

**2017-A12**

V.Abelev et al. (The ALICE Collaboration)  
*Azimuthal differential pion femtoscopy in Pb-Pb at 2.76 TeV*  
Physical Review Letters **118** (2017)222301  
DOI: 10.1103/PhysRevLett.118.222301

**2017-A13**

V.Abelev et al. (The ALICE Collaboration)  
 *$K^*(892)0$  and  $\Phi(1020)$  meson production at high transverse momentum in pp and Pb-Pb collisions at 2.76 TeV*  
Physical Review **C95**(2017)064606  
DOI: 10.1103/PhysRevC.95.064606

**2017-A14**

V.Abelev et al. (The ALICE Collaboration)  
*Measurement of the production of high- $p_T$  electrons from heavy flavor hadron decays in Pb-Pb at 2.76 TeV*  
Physics Letters **B771**(2017)467  
<https://doi.org/10.1016/j.physletb.2017.05.060>

**2017-A15**

V.Abelev et al. (The ALICE Collaboration)  
*Addendum: Centrality dependence of high  $p_T$  D-meson suppression in Pb-Pb Collisions at 2.76 TeV*  
JHEP **06**(2017)032  
DOI: 10.1007/JHEP06(2017)032

**2017-A16**

V.Abelev et al. (The ALICE Collaboration)  
*Measurement of azimuthal correlations of D-mesons and charged particles in pp collisions at 7 TeV and p-Pb at 5.02 TeV*  
European Journal of Physics **C77**(2017)245  
DOI: 10.1140/epjc/s10052-017-4779-8

**2017-A17**

V.Abelev et al. (The ALICE Collaboration)  
*Production of  $\pi^0$  and eta mesons up to high transverse momentum in pp collisions at 2.76 TeV*  
European Journal of Physics **C77**(2017)339  
DOI: 10.1140/epjc/s10052-017-4890-x

**2017-A18**

V.Abelev et al. (The ALICE Collaboration)  
*Production of  $\Sigma(1385)$  and  $\text{Csi}(1530)$  in p-Pb collisions at 5.02 TeV*  
European Journal of Physics **C77**(2017)389  
DOI: 10.1140/epjc/s10052-017-4943-1

**2017-A19**

V.Abelev et al. (The ALICE Collaboration)  
*Energy dependence of forward rapidity J/Psi and Psi(2S) production in pp collisions*  
European Journal of Physics **C77**(2017)392  
DOI: 10.1140/epjc/s10052-017-4940-4

**2017-A20**

V.Abelev et al. (The ALICE Collaboration)  
*Centrality dependence of the pseudorapidity density distribution for charged particles in Pb-Pb collisions at 5.02 TeV*  
Physics Letters **B772**(2017)567  
DOI: 10.1016/j.physletb.2017.07.017

**2017-A21**

V.Abelev et al. (The ALICE Collaboration)  
*Linear and non-linear flow mode in Pb-Pb collisions at  $\sqrt{s_{NN}}=2.76\text{TeV}$*   
Physics Letters **B773**(2017)68  
DOI: 10.1016/j.physletb.2017.07.060

**2017-A22**

V.Abelev et al. (The ALICE Collaboration)  
*Measurement of D-meson production at mid-rapidity in pp collisions at  $\sqrt{s} = 7$  TeV*  
European Journal of Physics **C77**(2017)550  
DOI: 10.1140/epjc/s10052-017-5090-4

**2017-A23**

V.Abelev et al. (The ALICE Collaboration)  
*Insight into particle production mechanisms via angular correlations of identified particles in pp collisions at  $\sqrt{s} = 7$  TeV*  
European Journal of Physics **C77**(2017)569  
DOI: 10.1140/epjc/s10052-017-5129-6

**2017-A24**

V.Abelev et al. (The ALICE Collaboration)  
*Measurement of electrons from beauty-hadron decays in p-Pb collisions at 5.02 TeV and PbPb collisions at 2.76 TeV*  
JHEP **07**(2017)052  
DOI: 10.1007/JHEP07(2017)052

**2017-A25**

S.Acharya et al. (The ALICE Collaboration)  
*Production of pi(0) and eta mesons up to high transverse momentum in pp collisions at 2.76 TeV (Erratum)*  
European Journal of Physics **C77**(2017)586  
DOI: 10.1140/epjc/s10052-017-5144-7

**2017-A26**

V.Abelev et al. (The ALICE Collaboration)  
*Evolution of the longitudinal and azimuthal structure of the near-side jet peak in Pb-Pb collisions at 2.76 TeV*  
Physical Review **C96**(2017)034904  
DOI: 10.1103/PhysRevC.96.034904

**2017-A27**

V.Abelev et al. (The ALICE Collaboration)  
*Measuring  $K^0_S K^+$  interactions using Pb-Pb collisions at 2.76 TeV*  
Physics Letters **B774**(2017)64  
DOI: 10.1016/j.physletb.2017.09.009

**2017-A28**

V.Abelev et al. (The ALICE Collaboration)  
*Anomalous evolution of the near side jet peak shape in Pb-Pb at 2.76 TeV*  
Physical Review Letters **119**(2017)102301  
DOI: 10.1103/PhysRevLett.119.102301

**2017-A29**

V.Abelev et al. (The ALICE Collaboration)  
*J/Psi elliptic flow in Pb-Pb collisions at 5.02 TeV*  
Physical Review Letters **119**(2017)242301  
DOI: 10.1103/PhysRevLett.119.242301

**2017-A30**

V.Abelev et al. (The ALICE Collaboration)  
*Kaon femtoscopy in Pb-Pb collisions at 2.76 TeV*  
Physical Review **C96**(2017)064613  
DOI: 10.1103/PhysRevC.96.064613

**2017-A31**

S.Acharya et al. (The ALICE Collaboration)  
*Measurement of deuteron spectra and elliptic flow in Pb-Pb collisions at 2.76 TeV*  
European Journal of Physics **C77**(2017)658  
DOI: 10.1140/epjc/s10052-017-5222-x

**2017-A32**

S.Acharya et al. (The ALICE Collaboration)  
*Charged-particle multiplicity distributions over a wide pseudorapidity range in proton-proton collisions at 0.9, 7 and 8 TeV*  
European Journal of Physics **C77**(2017)852  
DOI: 10.1140/epjc/s10052-016-4571-1

**2017-A33**

V.Abelev et al. (The ALICE Collaboration)  
*Searches for transverse momentum dependent flow vector fluctuations in Pb-Pb and p-Pb collisions at LHC*  
JHEP **09**(2017)032  
DOI: 10.1007/JHEP09(2017)032

**2017-A34**

F.Carnesecchi et al. (The EEE Collaboration)  
*Extreme Energy Events Project: Construction of the detectors*  
Proceedings of Science (EPS-HEP2017) **314**(2017)820

**2017-A35**

S.Grazzi et al. (The EEE Collaboration)  
*Students from all part of peninsula collaborate to study cosmic rays*  
Proceedings of Science (EPS-HEP2017) **314**(2017)823

**2017-A36**

M.Abbrescia et al. (The EEE Collaboration)  
*The EEE Project: Science in Schools, state and results*  
Nuclear and Particle Physics Proceedings 291-293(2017)110  
DOI: 10.1016/j.nuclphysbps.2017.06.022

**2017-A37**

F.Riggi et al. (The EEE Collaboration)

*Time and orientation long distance correlations between extensive air showers detected by the MRPC telescopes of the EEE Project*

Nuovo Cimento **C40**(2017)196

DOI 10.1393/ncc/i2017-17196-0

## Pubblicazioni 2018

### 2018-A1

V.Abelev et al. (The ALICE Collaboration)  
*The ALICE TRD detector: construction, operation and performance*  
Nuclear Instruments and Methods **A881**(2018)88  
Doi: 10.1016/j.nima.2017.09.028

### 2018-A2

V.Abelev et al. (The ALICE Collaboration)  
*J/Psi production as a function of charged particle pseudorapidity density in p-Pb collisions at 5.02 TeV*  
Physics Letters **B776**(2018)91  
Doi: 10.1016/j.physletb.2017.11.008

### 2018-A3

V.Abelev et al. (The ALICE Collaboration)  
*First measurement of jet mass in Pb-Pb and p-Pb collisions at LHC*  
Physics Letters **B776**(2018)249  
Doi: 10.1016/j.physletb.2017.11.044

### 2018-A4

M.Abbrescia et al. (The EEE Collaboration)  
*Search for long distance correlations between extensive air showers detected by the EEE telescopes*  
European Physical Journal Plus **133**(2018)34  
Doi: [10.1140/epjp/i2018-11898-x](https://doi.org/10.1140/epjp/i2018-11898-x)

### 2018-A5

S.Acharya et al. (The ALICE Collaboration)  
*D-Meson Azimuthal Anisotropy in Midcentral Pb-Pb Collisions root S-NN=5.02 TeV*  
Phys. Rev.Letters **120**(2018)102301  
DOI: 10.1103/PhysRevLett.120.102301

### 2018-A6

S.Acharya et al. (The ALICE Collaboration)  
*Production of He4 and anti-He4 in Pb-Pb collisions at root(NN)-N-S=2.76 TeV at the LHC*  
Nuclear Physics **A971**(2018)1  
DOI: 10.1016/j.nuclphysa.2017.12.004

### 2018-A7

S.Acharya et al. (The ALICE Collaboration)  
*Production of deuterons, tritons, He-3 nuclei, and their antinuclei in pp collisions at root s=0.9, 2.76, and 7 TeV*  
Phys. Rev. **C97**(2018)024615

DOI: 10.1103/PhysRevC.97.024615

**2018-A8**

S.Acharya et al. (The ALICE Collaboration)

*Systematic studies of correlations between different order flow harmonics in Pb-Pb collisions at root  $s(NN)=2.76$  TeV*

Phys.Rev. **C97**(2018)024906

DOI: 10.1103/PhysRevC.97.024906

**2018-A9**

S.Acharya et al. (The ALICE Collaboration)

*Pi0 and eta-meson production in proton-proton collisions at 8 TeV*

European Physical Journal **C78**(2018)263.

Doi: 10.1140/epjc/s10052-018-5612-8

**2018-A10**

V.Abelev et al. (The ALICE Collaboration)

*Constraining the magnitude of the Chiral Magnetic Effect with event shape engineering In Pb-Pb collisions at 2.76 TeV*

Physics Letters **B777**(2018)151

Doi: 10.1016/j.physletb.2017.12.021

**2018-A11**

V.Abelev et al. (The ALICE Collaboration)

*Search for collectivity with azimuthal  $J/\psi$ -hadron correlations in high multiplicity p-Pb collisions at  $\sqrt{sNN}=5.02$  and 8.16 TeV*

Physics Letters **B780**(2018)7

[doi: 10.1016/j.physletb.2018.02.039](https://doi.org/10.1016/j.physletb.2018.02.039)

**2018-A12**

V.Abelev et al. (The ALICE Collaboration)

*Measurement of Z0-boson production at large rapidities in Pb-Pb collisions at  $\sqrt{sNN}=5.02$  TeV*

Physics Letters **B780**(2018)372

[Doi: 10.1016/j.physletb.2018.03.010](https://doi.org/10.1016/j.physletb.2018.03.010)

**2018-A13**

V.Abelev et al. (The ALICE Collaboration)

*First measurement of Xi0c production in pp collisions at  $\sqrt{s}=7$  TeV*

Physics Letters **B781**(2018)8

Doi: 10.1016/j.physletb.2018.03.061

**2018-A14**

V.Abelev et al. (The ALICE Collaboration)

*Longitudinal asymmetry and its effect on pseudorapidity distributions in Pb-Pb collisions at  $\sqrt{sNN}=2.76$  TeV*

Physics Letters **B781**(2018)20  
Doi: 10.1016/j.physletb.2018.03.051

**2018-A15**

V.Abelev et al. (The ALICE Collaboration)  
*Prompt and non prompt J/Psi production and nuclear modification at mid-rapidity in p-Pb collisions at 5.02 TeV*  
European Physical Journal **C78** (2018) 466  
Doi: 10.1140/epjc/s10052-018-5881-2

**2018-A16**

V.Abelev et al. (The ALICE Collaboration)  
*Constraining on jet quenching in p-Pb collisions at 5.02 TeV measured by the event activity dependence of semi-inclusive hadron-jet distribution*  
Physics Letters **B783** (2018)95  
doi: 10.1016/j.physletb.2018.05.059

**2018-A17**

S.Acharya et al. (The ALICE Collaboration)  
*Phi meson production at forward rapidity in Pb-Pb collisions at root s(NN)=2.76 TeV*  
European Physical Journal **C78** (2018) 559  
doi: 10.1140/epjc/s10052-018-6034-3

**2018-A18**

S.Acharya et al. (The ALICE Collaboration)  
*Measurements of the inclusive J/Psi polarization at forward rapidity in pp collisions at 8 TeV*  
European Physical Journal **C78** (2018)562  
Doi: 10.1140/epjc/s10052-018-6027-2

**2018-A19**

S.Acharya et al. (The ALICE Collaboration)  
*Lambda\_c production in pp collisions at 7 TeV and p-Pb collisions at 5.02 TeV*  
Journal of High Energy Physics **04** (2018)108  
**Doi:** 10.1007/JHEP04(2018)108

**2018-A20**

S.Acharya et al. (The ALICE Collaboration)  
*Energy dependence and fluctuations of anisotropic flow in Pb-Pb collisions at 5.02 and 2.76 TeV*  
Journal of High Energy Physics **07** (2018)103  
Doi: 10.1007/JHEP07(2018)103

**2018-A21**

S.Acharya et al. (The ALICE Collaboration)  
*Inclusive J/Psi production at forward and backward rapidity in p-Pb collisions at 8.16 TeV*  
Journal of High Energy Physics **07** (2018)160  
Doi: 10.1007/JHEP07(2018)160

**2018-A22**

D.Lo Presti et al.  
*The MEV Project: Design and testing of a new high resolution telescope for Muography of Etna volcano*  
Nuclear Instruments and Methods **A904** (2018)195  
Doi: 10.1016/j.nima.2018.07.048

**2018-A23**

V.Abelev et al. (The ALICE Collaboration)  
*Anisotropic flow in Xe-Xe at 5.44 TeV*  
Physics Letters **B784**(2018)82  
Doi: 10.1016/j.physletb.2018.06.059

**2018-A24**

S.Acharya et al. (The ALICE Collaboration)  
*Anisotropic flow of identified particles in Pb-Pb collisions at root s(NN)=5.02 TeV*  
Journal of High Energy Physics **9**(2018)006  
Doi: 10.1007/JHEP09(2018)006

**2018-A25**

S.Acharya et al. (The ALICE Collaboration)  
*Dielectron production in proton-proton collisions at root s=7 TeV*  
Journal of High Energy Physics **9**(2018)064  
Doi: 10.1007/JHEP09(2018)064

**2018-A26**

S.Acharya et al. (The ALICE Collaboration)  
*Medium modification of the shape of small-radius jets in central Pb-Pb collisions at 2.76 TeV*  
Journal of High Energy Physics **10**(2018)139  
Doi: 10.1007/JHEP10(2018)139

**2018-A27**

S.Acharya et al. (The ALICE Collaboration)  
*Azimuthally-differential pion femtoscopy relative to the third harmonic event plane in Pb-Pb collisions at 2.76 TeV*  
Physics Letters **B785**(2018)320  
Doi: 10.1016/j.physletb.2018.06.042

**2018-A28**

S.Acharya et al. (The ALICE Collaboration)  
*Inclusive  $J/\psi$  production in Xe-Xe collisions at  $\sqrt{s(NN)}=5.44$  TeV*  
Physics Letters B **785**(2018)419  
Doi: 10.1016/j.physletb.2018.08.047

**2018-A29**

S.Acharya et al. (The ALICE Collaboration)  
*Neutral pion and eta meson production at midrapidity in Pb-Pb collisions at 2.76 TeV*  
Physical Review C **98**(2018)044901  
Doi: 10.1103/PhysRevC.98.044901

**2018-A30**

P.La Rocca, D.Nicotra and F.Riggi  
*GEANT4 simulations of small cosmic ray detection modules based on scintillators and WLS bars*  
Journal of Instrumentation **13**(2018)P10013  
Doi: 10.1088/1748-0221/13/10/P10013

**2018-A31**

S.Acharya et al. (The ALICE Collaboration)  
*Neutral pion and eta meson production in p-Pb collisions at 5.02 TeV*  
European Physical Journal C **78**(2018)624  
Doi: 10.1140/epjc/s10052-018-6013-8

**2018-A32**

M.Abbrescia et al. (The EEE Collaboration)  
*The Extreme Energy Events experiment: an overview of the telescope performance*  
Journal of Instrumentation **13**(2018)P08026  
Doi: 10.1088/1748-0221/13/08/P08026

**2018-A33**

M.Abbrescia et al. (The EEE Collaboration)  
*Come varia il flusso dei raggi cosmici con la quota? Basta chiederlo agli studenti del Progetto EEE*  
Giornale di Fisica **LIX**(2018)229  
DOI 10.1393/gdf/i2018-10306-2

**2018-A34**

S.Acharya et al. (The ALICE Collaboration)  
*Measurement of  $D^0$ ,  $D^+$ ,  $D^+$  and  $D^+$ s production in Pb-Pb collisions at 5.02 TeV*  
Journal of High Energy Physics **10**(2018)174  
Doi: 10.1007/JHEP10(2018)174

**2018-A35**

S.Acharya et al. (The ALICE Collaboration)  
*Transverse momentum spectra and nuclear modification factors of charged particles in pp, p-Pb and Pb-Pb collisions at the LHC*

Journal of High Energy Physics **11**(2018)013  
Doi: 10.1007/JHEP11(2018)013

**2018-A36**

P.La Rocca, D.Lo Presti and F.Riggi  
*Cosmic Ray Muons as Penetrating Probes to Explore the World around Us*, in  
Z.Szadkowski Ed., Cosmic Rays, Chapter 3, InTechOpen, ISBN: 978-1-78923-592-0  
Doi: 10.5772/intechopen.72533

**2018-A37**

F.Riggi et al. (The Muon Portal Collaboration)  
*The Muon Portal Project: Commissioning of the full detector and first results*  
Nuclear Instruments and Methods **A912**(2018)16  
DOI: 10.1016/j.nima.2017.10.006

## Pubblicazioni 2019

### 2019-A1

P.La Rocca, D.Nicotra, O.Parasole, F.Riggi and G.Zappalà:  
*Design and characterization of small detection modules based on scintillators and WLS bars with SiPM readout for a cosmic ray mini-array*  
Journal of Instrumentation **14**(2019)T01003  
<https://doi.org/10.1088/1748-0221/14/01/T01003>

### 2019-A2

S.Acharya et al. (The ALICE Collaboration)  
*Transverse momentum spectra and nuclear modification factors of charged particles in Xe–Xe collisions at  $\sqrt{s_{NN}} = 5.44$  TeV*  
Physics Letters **B788**(2019)166  
Doi: 10.1016/j.physletb.2018.10.052

### 2019-A3

S.Acharya et al. (The ALICE Collaboration)  
*Dielectron and heavy-quark production in inelastic and high-multiplicity proton–proton collisions at  $\sqrt{s} = 13$  TeV*  
Physics Letters **B788**(2019)505  
Doi: 10.1016/j.physletb.2018.11.009

### 2019-A4

S.Acharya et al. (The ALICE Collaboration)  
*Direct photon elliptic flow in Pb–Pb collisions at  $\sqrt{s_{NN}} = 2.76$  TeV*  
Physics Letters **B789**(2019)308  
Doi: 10.1016/j.physletb.2018.11.039

### 2019-A5

S.Acharya et al. (The ALICE Collaboration)  
*Suppression of  $\Lambda(1520)$  resonance production in central Pb–Pb collisions at 2.76 TeV*  
Phys.Rev. **C99**(2019)024905  
DOI: 10.1103/PhysRevC.99.024905

### 2019-A6

S.Acharya et al. (The ALICE Collaboration)  
*Multiplicity dependence of light flavor production in pp collisions at 7 TeV*  
Phys.Rev. **C99**(2019)024906  
DOI: 10.1103/PhysRevC.99.024906

### 2019-A7

S.Acharya et al. (The ALICE Collaboration)  
*pp, p $\Lambda$  and  $\Lambda$ – $\Lambda$  correlations studied via femtoscopy in pp reactions at 7 TeV*  
Phys.Rev. **C99**(2019)024001  
DOI: 10.1103/PhysRevC.99.024001

**2019-A8**

S.Acharya et al. (The ALICE Collaboration)  
*Measurement of dielectron production in central Pb-Pb collisions at 2.76 TeV*  
Phys.Rev. **C99**(2019)024002  
DOI: 10.1103/PhysRevC.99.024002

**2019-A9**

S.Acharya et al. (The ALICE Collaboration)  
*Charged jet cross section and fragmentation in pp collisions at 7 TeV*  
Phys.Rev. **D99**(2019)012016  
DOI: 10.1103/PhysRevD.99.012016

**2019-A10**

S.Acharya et al. (The ALICE Collaboration)  
*Study of J/Psi azimuthal anisotropy at forward rapidity in Pb-Pb collisions at 5.02 TeV*  
JHEP **2**(2019)012  
Doi: 10.1007/JHEP02(2019)012

**2019-A11**

S. Acharya et al. (The ALICE Collaboration)  
*Measuring  $K0S_{K^\pm}$  interactions using pp collisions at  $\sqrt{s} = 7$  TeV*  
Physics Letters **B790**(2019)22  
Doi: 10.1016/j.physletb.2018.12.033

**2019-A12**

S. Acharya et al. (The ALICE Collaboration)  
*Centrality and pseudorapidity dependence of the charged-particle multiplicity density in Xe-Xe collisions at  $\sqrt{s_{NN}} = 5.44$  TeV*  
Physics Letters **B790**(2019)35  
Doi: 10.1016/j.physletb.2018.12.048

**2019-A13**

S. Acharya et al. (The ALICE Collaboration)  
 *$\Upsilon$  suppression at forward rapidity in Pb-Pb collisions at  $\sqrt{s_{NN}} = 5.02$  TeV*  
Physics Letters **B790**(2019)89  
Doi: 10.1016/j.physletb.2018.11.067

**2019-A14**

S. Acharya et al. (The ALICE Collaboration)  
*Direct photon production at low transverse momentum in proton-proton collisions at  $\sqrt{s} = 2.76$  and 8 TeV*  
Physical Review **C99**(2019)024912  
DOI: 10.1103/PhysRevC.99.024912

**2019-A15**

S. Acharya et al. (The ALICE Collaboration)  
*Charged jet cross section and fragmentation in proton-proton collisions at 7 TeV*  
Physical Review **D99**(2019)012016  
DOI: 10.1103/PhysRevD.99.012016

**2019-A16**

S. Acharya et al. (The ALICE Collaboration)  
*Azimuthal Anisotropy of Heavy-Flavor Decay Electrons in p-Pb Collisions at 5.02 TeV*  
Physical Review Letters **122**(2019)072301  
DOI: [10.1103/PhysRevLett.122.072301](https://doi.org/10.1103/PhysRevLett.122.072301)

**2019-A17**

S. Acharya et al. (The ALICE Collaboration)  
*Relative particle yield fluctuations in PbPb collisions at 2.76 TeV*  
European Physical Journal **C79**(2019)236  
<https://doi.org/10.1140/epjc/s10052-019-6711-x>

**2019-A18**

S. Acharya et al. (The ALICE Collaboration)  
*Charged particle pseudorapidity density at mid-rapidity in p-Pb collisions at 8.16 TeV*  
European Physical Journal **C79**(2019)307  
<https://doi.org/10.1140/epjc/s10052-019-6801-9>

**2019-A19**

S. Acharya et al. (The ALICE Collaboration)  
*Measurement of  $D^0$ ,  $D^+$ ,  $D^{*+}$  and  $D_s^+$  production in pp collisions at 5.02 TeV with ALICE*  
European Physical Journal **C79**(2019)388  
<https://doi.org/10.1140/epjc/s10052-019-6873-6>

**2019-A20**

S. Acharya et al. (The ALICE Collaboration)  
*Jet fragmentation transverse momentum measurements from di-hadron correlations in 7 TeV pp and 5.02 TeV p-Pb collisions*  
JHEP **03**(2019)169  
[https://doi.org/10.1007/JHEP03\(2019\)169](https://doi.org/10.1007/JHEP03(2019)169)

**2019-A21**

M.P. Panetta et al. (The EEE Collaboration)  
*The new trigger/GPS module for the EEE project*  
Nuclear Instruments and Methods in Physics Research, **A936** (2019)376  
Doi: [10.1016/j.nima.2018.10.127](https://doi.org/10.1016/j.nima.2018.10.127)

**2019-A22**

M. Garbini et al. (The EEE Collaboration)  
*Performance of the multigap resistive plate chambers of the extreme energy events project*  
Nuclear Instruments and Methods in Physics Research, **A936** (2019)474  
Doi: [10.1016/j.nima.2018.09.007](https://doi.org/10.1016/j.nima.2018.09.007)

**2019-A23**

M. Trimarchi et al. (The EEE Collaboration)  
*Test of new eco-gas mixtures for the multigap resistive plate chambers of the EEE project*  
Nuclear Instruments and Methods in Physics Research, **A936** (2019)493  
Doi: 10.1016/j.nima.2018.10.010

**2019-A24**

D.Bonanno, G.Gallo, P.La Rocca, F.Longhitano, D.Lo Presti, C.Pinto, F.Riggi  
*Measurement of nearly horizontal cosmic muons at high altitudes with the MEV telescope*  
European Physical Journal Plus **134**(2019)281  
DOI 10.1140/epjp/i2019-12683-1

**2019-A25**

M.Abbrescia et al. (The EEE Collaboration)  
*The EEE MRPC telescopes as tracking tools to monitor building stability*  
Journal of Instrumentation **14**(2019)P06035  
<https://doi.org/10.1088/1748-0221/14/06/P06035>

**2019-A26**

M.Abbrescia et al. (The EEE Collaboration)  
*First results from the upgrade of the Extreme Energy Event experiment*  
Journal of Instrumentation **14**(2019)C08005  
<https://doi.org/10.1088/1748-0221/14/08/C08005>

**2019-A27**

M.Abbrescia et al. (The EEE Collaboration)  
*Performance of the Multigap Resistive Plate Chambers of the Extreme Energy Event experiment*  
Journal of Instrumentation **14**(2019)C05022  
<https://doi.org/10.1088/1748-0221/14/05/C05022>

**2019-A28**

M.Abbrescia et al. (The EEE Collaboration)  
*Gli studenti del progetto EEE sulle orme di Eratostene per la misura del raggio della Terra*  
Giornale di Fisica **60**(2019)107  
DOI 10.1393/gdf/i2019-10328-2

**2019-A29**

S.Acharya et al. (The ALICE Collaboration)  
*Real-time data processing in the ALICE High Level Trigger at the LHC*  
Computer Physics Communications **24**(2019)25  
<https://doi.org/10.1016/j.cpc.2019.04.011>

**2019-A30**

S.Acharya et al. (The ALICE Collaboration)  
*Lambda<sub>c</sub> - production in Pb–Pb collisions at  $\sqrt{s_{NN}}=5.02\text{TeV}$*   
Physics Letters **B793**(2019)212  
<https://doi.org/10.1016/j.physletb.2019.04.046>

**2019-A31**

S.Acharya et al. (The ALICE Collaboration)  
*Analysis of the apparent nuclear modification in peripheral Pb–Pb collisions at 5.02TeV*  
Physics Letters **B793**(2019)420  
<https://doi.org/10.1016/j.physletb.2019.04.047>

**2019-A32**

S.Acharya et al. (The ALICE Collaboration)  
*Multiplicity dependence of (anti-)deuteron production in pp collisions at  $\sqrt{s}=7\text{TeV}$*   
Physics Letters **B794**(2019)50  
<https://doi.org/10.1016/j.physletb.2019.05.028>

**2019-A33**

S.Acharya et al. (The ALICE Collaboration)  
*Production of the  $\rho(770)0$  meson in pp and Pb-Pb collisions at  $\sqrt{s_{NN}} = 2.76 \text{ TeV}$*   
Physical Review **C99**(2019)064901  
doi: 10.1103/PhysRevC.99.064901

**2019-A34**

S.Acharya et al. (The ALICE Collaboration)  
*Energy dependence of exclusive  $J/\psi$  photoproduction off protons in ultra-peripheral p–Pb collisions at  $\sqrt{s_{NN}} = 5.02 \text{ TeV}$*   
Eur. Phys. J. **C79**(2019) 402  
<https://doi.org/10.1140/epjc/s10052-019-6816-2>

**2019-A35**

S.Acharya et al. (The ALICE Collaboration)  
*Calibration of the photon spectrometer PHOS of the ALICE experiment*  
Journal of Instrumentation **14**(2019)P05025  
<https://doi.org/10.1088/1748-0221/14/05/P05025>

**2019-A36**

S.Pisano et al. (The EEE Collaboration)  
*New eco-gas mixtures for the Extreme Energy Events MRPCs: results and plans*  
Journal of Instrumentation **14**(2019)C08008  
<https://doi.org/10.1088/1748-0221/14/08/C08008>

**2019-A37**

C.Pellegrino et al. (The EEE Collaboration)  
*First results from the PolarquEEEst*  
Proceedings of Science POS(ICRC2019)371

**2019-A38**

C.Cicalò et al. (The EEE Collaboration)  
*The Extreme Energy Events experiment*  
Proceedings of Science POS(ICRC2019)389

**2019-A39**

F.Riggi, D.Bonanno, G.Gallo, P.La Rocca, F.Longhitano, D.Lo Presti, C.Pinto  
*Measurement of single and multiple muons at high altitudes with the MEV telescope*  
Proceedings of Science POS(EPS-HEP2019)038

**2019-A40**

P.La Rocca et al. (The EEE Collaboration)  
*Search for long distance correlations with the EEE network*  
Proceedings of Science POS(EPS-HEP2019)051

**2019-A41**

C.Pinto, P.La Rocca, D.Nicotra, O.Parasole and F.Riggi  
*A low cost reconfigurable mini-array facility for (under)graduate studies in cosmic ray physics*  
Proceedings of Science POS(EPS-HEP2019)438

**2019-A42**

P.La Rocca et al. (The EEE Collaboration)  
*Search for coincident air showers over large scale distances with the EEE network*  
Nuclear Physics **B306-308**(2019)175

**2019-A43**

M.P. Panetta et al. (The EEE Collaboration)  
*The new trigger/GPS module for the EEE project*  
Nuclear Instruments and Methods in Physics Research **A942** (2019)162358  
10.1016/j.nima.2019.162358

**2019-A44**

S.Acharya et al. (The ALICE Collaboration)  
*Two-particle differential transverse momentum and number density correlations in p-Pb collisions at 5.02 TeV and Pb-Pb collisions at 2.76 TeV at the CERN Large Hadron Collider*  
Physical Review **C100**(2019)044903  
DOI: 10.1103/PhysRevC.100.044903

**2019-A45**

S.Acharya et al. (The ALICE Collaboration)  
*One-dimensional charged kaon femtoscopy in p-Pb collisions at 5.02 TeV*  
Physical Review **C100**(2019)024002  
DOI: 10.1103/PhysRevC.100.024002

**2019-A46**

S.Acharya et al. (The ALICE Collaboration)  
*Measurement of jet radial profile in Pb-Pb collisions at 2.76 TeV*  
Physics Letters **B796**(2019)204  
DOI: 10.1016/j.physletb.2019.07.020

**2019-A47**

S.Acharya et al. (The ALICE Collaboration)  
*Study of the Lambda-Lambda interaction with femtoscopy correlations in pp and p-Pb collisions at the LHC*  
Physics Letters **B797**(2019)134822  
DOI: 10.1016/j.physletb.2019.134822

**2019-A48**

S.Acharya et al. (The ALICE Collaboration)  
*H-3(Lambda) and anti-3H(Lambda) lifetime measurements in PbPb collisions at 5.02 TeV via two-body decay*  
Physics Letters **B797**(2019)134905  
DOI: 10.1016/j.physletb.2019.134905

**2019-A49**

S. Acharya et al. (The ALICE Collaboration)  
*First observation of an attractive interaction between a proton and a cascade baryon*  
Physical Review Letters **123**(2019)112002  
DOI: 10.1103/PhysRevLett.123.112002

**2019-A50**

S. Acharya et al. (The ALICE Collaboration)  
*Investigations of anisotropic flow using multiparticle azimuthal correlations in pp, p-Pb, Xe-Xe and Pb-Pb collisions at LHC*  
Physical Review Letters **123**(2019)142301  
DOI: 10.1103/PhysRevLett.123.142301

**2019-A51**

S. Acharya et al. (The ALICE Collaboration)  
*Measurement of the production of charm jets tagged with D0 mesons in pp collisions at 7 TeV*  
JHEP **8**(2019)133  
DOI: 10.1007/JHEP08(2019)133

**2019-A52**

S.Acharya et al. (The ALICE Collaboration)  
*Charged particle production as a function of multiplicity and transverse sphericity in pp and PbPb collisions at 5.02 TeV*  
Eur. Phys. J. **C79**(2019) 857  
<https://doi.org/10.1140/epjc/s10052-019-7350-y>

**2019-A53**

S. Acharya et al. (The ALICE Collaboration)  
*Production of muons from heavy-flavour hadron decays in pp collisions at 5.02 TeV*  
JHEP **9**(2019)008  
DOI: 10.1007/JHEP09(2019)008

**2019-A54**

S. Acharya et al. (The ALICE Collaboration)  
*Measurement of the inclusive isolated photon production cross section in pp collisions at 7 TeV*  
European Physical Journal **C79**(2019)896  
DOI: [10.1140/EPJC/S10052-019-7389-9](https://doi.org/10.1140/EPJC/S10052-019-7389-9)

**2019-A55**

S. Acharya et al. (The ALICE Collaboration)  
*Measurement of Upsilon(1S) Elliptic Flow at forward rapidity in Pb-Pb collisions At 5.02 TeV*  
Physical Review Letters **123**(2019)192301  
DOI: 10.1103/PhysRevLett.123.192301

**2019-A56**

S. Acharya et al. (The ALICE Collaboration)  
*Coherent J/Psi photoproduction at forward rapidity in ultraperipheral PbPb collisions At 5.02 TeV*  
Physics Letters **B798**(2019)134926  
DOI: 10.1016/j.physletb.2019.134926

**2019-A57**

S. Acharya et al. (The ALICE Collaboration)  
*Event shape and multiplicity dependence of freeze-out radii in pp collisions at 7 TeV*  
JHEP **9**(2019)108  
DOI: 10.1007/JHEP09(2019)108

**2019-A58**

S. Acharya et al. (The ALICE Collaboration)  
*Measurement of charged jet cross section in pp collisions at 5.02 TeV*  
Physical Review **D100**(2019)092004  
DOI: 10.1103/PhysRevD.100.092004

**2019-A59**

S. Acharya et al. (The ALICE Collaboration)  
*Inclusive J/Psi production at mid-rapidity in pp collisions at 5.02 TeV*  
JHEP **10**(2019)084  
[https://doi.org/10.1007/JHEP10\(2019\)084](https://doi.org/10.1007/JHEP10(2019)084)

**2019-A60**

S. Acharya et al. (The ALICE Collaboration)

*Measurement of prompt  $D^0, D^+$  and  $D_s^+$  in  $p$ -Pb collisions at 5.02 TeV*

JHEP **12**(2019)092

[https://doi.org/10.1007/JHEP12\(2019\)092](https://doi.org/10.1007/JHEP12(2019)092)

## Publicazioni 2020

### 2020-A1

S.Acharya et al. (The ALICE Collaboration)  
*Multiplicity dependence of light (anti-)nuclei production in p-Pb collisions at 5.02 TeV*  
Physics Letters **B800**(2020)135043  
<https://doi.org/10.1016/j.physletb.2019.135043>

### 2020-A2

S.Acharya et al. (The ALICE Collaboration)  
*Measurement of strange baryon–antibaryon interactions with femtoscopic correlations*  
Physics Letters **B802**(2020)135223  
<https://doi.org/10.1016/j.physletb.2020.135223>

### 2020-A3

S.Acharya et al. (The ALICE Collaboration)  
*Evidence of rescattering effect in Pb–Pb collisions at the LHC through production of  $K^*(892)^0$  and  $\phi(1020)$  mesons*  
Physics Letters **B802**(2020)135225  
<https://doi.org/10.1016/j.physletb.2020.135225>

### 2020-A4

S.Acharya et al. (The ALICE Collaboration)  
*Exploration of jet substructure using iterative declustering in pp and Pb–Pb collisions at LHC energies*  
Physics Letters **B802**(2020)135227  
<https://doi.org/10.1016/j.physletb.2020.135227>

### 2020-A5

S.Acharya et al. (The ALICE Collaboration)  
*Longitudinal and azimuthal evolution of two-particle transverse momentum correlations in Pb-Pb collisions at 2.76 TeV*  
Physics Letters **B804**(2020)135375  
<https://doi.org/10.1016/j.physletb.2020.135375>

### 2020-A6

S.Acharya et al. (The ALICE Collaboration)  
*Measurement of electrons from semileptonic heavy-flavour hadron decays at mid-rapidity in pp and PbPb collisions at 5.02 TeV*  
Physics Letters **B804**(2020)135377  
<https://doi.org/10.1016/j.physletb.2020.135377>

### 2020-A7

S.Acharya et al. (The ALICE Collaboration)  
*Measurement of the (anti-) $^3\text{He}$  elliptic flow in Pb-Pb collisions at 5.02 TeV*  
Physics Letters **B805**(2020)135414  
<https://doi.org/10.1016/j.physletb.2020.135414>

**2020-A8**

S.Acharya et al. (The ALICE Collaboration)  
*Investigation of the  $p$ - $\Sigma^0$  interaction via femtoscopy in  $pp$  collisions*  
Physics Letters **B805**(2020)135419  
<https://doi.org/10.1016/j.physletb.2020.135419>

**2020-A9**

S.Acharya et al. (The ALICE Collaboration)  
*Centrality and transverse momentum dependence of inclusive  $J/\psi$  production at midrapidity in  $Pb-Pb$  collisions at  $\sqrt{s_{NN}} = 5.02$  TeV*  
Physics Letters **B805**(2020)135434  
<https://doi.org/10.1016/j.physletb.2020.135434>

**2020-A10**

S.Acharya et al. (The ALICE Collaboration)  
*Measurement of  $\Lambda(1520)$  production in  $pp$  collisions at 7 TeV and  $p$ - $Pb$  collisions at 5.02 TeV*  
European Physical Journal **C80**(2020)160  
<https://doi.org/10.1140/epjc/s10052-020-7687-2>

**2020-A11**

S.Acharya et al. (The ALICE Collaboration)  
*Multiplicity dependence of (multi)-strange hadron production in  $pp$  collisions at 13 TeV*  
European Physical Journal **C80**(2020)167  
<https://doi.org/10.1140/epjc/s10052-020-7673-8>

**2020-A12**

S.Acharya et al. (The ALICE Collaboration)  
*Studies of  $J/\Psi$  production at forward rapidity in  $Pb-Pb$  collisions at 5.02 TeV*  
JHEP **02**(2020)041  
[https://doi.org/10.1007/JHEP02\(2020\)041](https://doi.org/10.1007/JHEP02(2020)041)

**2020-A13**

S.Acharya et al. (The ALICE Collaboration)  
*Measurement of electrons from heavy-flavour hadron decays as a function of multiplicity in  $p$ - $Pb$  at 5.02 TeV*  
JHEP **02**(2020)077  
[https://doi.org/10.1007/JHEP02\(2020\)077](https://doi.org/10.1007/JHEP02(2020)077)

**2020-A14**

S.Acharya et al. (The ALICE Collaboration)  
*Underlying event properties in  $pp$  collisions at  $\sqrt{s} = 13$  TeV*  
JHEP **04**(2020)192  
[https://doi.org/10.1007/JHEP04\(2020\)192](https://doi.org/10.1007/JHEP04(2020)192)

**2020-A15**

S.Acharya et al. (The ALICE Collaboration)  
*Higher harmonic non-linear flow modes of charged hadrons in Pb-Pb collisions at  $\sqrt{s_{NN}} = 5.02$  TeV*  
JHEP **05**(2020)085  
[https://doi.org/10.1007/JHEP05\(2020\)085](https://doi.org/10.1007/JHEP05(2020)085)

**2020-A16**

S.Acharya et al. (The ALICE Collaboration)  
*Coherent photoproduction of  $\rho_0$  vector mesons in ultra-peripheral Pb-Pb Collisions at 5.02 TeV*  
JHEP **06**(2020)035  
[https://doi.org/10.1007/JHEP06\(2020\)035](https://doi.org/10.1007/JHEP06(2020)035)

**2020-A17**

S.Acharya et al. (The ALICE Collaboration)  
*Non linear flow modes of identified particles in Pb-Pb collisions at 5.02 TeV*  
JHEP **06**(2020)147  
[https://doi.org/10.1007/JHEP06\(2020\)147](https://doi.org/10.1007/JHEP06(2020)147)

**2020-A18**

S.Acharya et al. (The ALICE Collaboration)  
*Scattering studies with low energy kaon-proton femtoscopy in pp collisions at LHC*  
Physical Review Letters **124**(2020)092301  
10.1103/PhysRevLett.124.092301

**2020-A19**

S.Acharya et al. (The ALICE Collaboration)  
*Evidence of spin-orbital angular momentum interactions in relativistic heavy ion collisions*  
Physical Review Letters **125**(2020)012301  
DOI: 10.1103/PhysRevLett.125.012301

**2020-A20**

S.Acharya et al. (The ALICE Collaboration)  
*Probing the effects of strong electromagnetic fields with charge dependent directed Flow in Pb-Pb collisions at the LHC*  
Physical Review Letters **125**(2020)022301  
DOI: 10.1103/PhysRevLett.125.022301

**2020-A21**

S.Acharya et al. (The ALICE Collaboration)  
*Measurements of inclusive jet spectra in pp and central PbPb collisions at 5.02 TeV*  
Physical Review **C101**(2020)034911  
10.1103/PhysRevC.101.034911

**2020-A22**

S.Acharya et al. (The ALICE Collaboration)  
*Global polarization of Lambda and anti-Lambda hyperons in Pb-Pb collisions at*

2.76 and 5.02 TeV  
Physical Review **C101**(2020)044611  
10.1103/PhysRevC.101.044611

**2020-A23**

S.Acharya et al. (The ALICE Collaboration)  
*Production of (anti-)3 He and (anti-)3 H in p-Pb collisions at  $\sqrt{s_{NN}} = 5.02$  TeV*  
Physical Review **C101**(2020)044906  
10.1103/PhysRevC.101.044906

**2020-A24**

S.Acharya et al. (The ALICE Collaboration)  
*Production of charged pions, kaons, and (anti-)protons in Pb-Pb and inelastic pp collisions at  $\sqrt{s_{NN}} = 5.02$  TeV*  
Physical Review **C101**(2020)044907  
10.1103/PhysRevC.101.044907

**2020-A25**

S.Acharya et al. (The ALICE Collaboration)  
*Jet-hadron correlations measured relative to the second order event plane in Pb-Pb collisions at 2.76 TeV*  
Physical Review **C101**(2020)064901  
10.1103/PhysRevC.101.064901

**2020-A26**

G.Gallo et al.  
*Improvement of data analysis and self-consistent monitoring methods for the MEV telescope*  
Nuclear Instruments and Methods **A958**(2020)162052  
<https://doi.org/10.1016/j.nima.2019.04.006>

**2020-A27**

F.Riggi et al.  
*Investigation of the cosmic ray angular distribution and the East-West effect near the top of Etna volcano with the MEV telescope*  
Eur.Phys. J. Plus **135**(2020)280  
<https://doi.org/10.1140/epjp/s13360-020-00287-x>

**2020-A28**

C.Pinto et al. (The EEE Collaboration)  
*Measurements with cosmic muons to monitor the stability of a civil building on a long time-scale*  
JINST **15**(2020)C03058  
<https://doi.org/10.1088/1748-0221/15/03/C03058>

**2020-A29**

P.La Rocca, D.Nicotra, O.Parasole, C.Pinto and F.Riggi

*First commissioning measurements with a reconfigurable cosmic ray mini-array*  
JINST **15**(2020)T02003  
<https://doi.org/10.1088/1748-0221/15/02/T02003>

**2020-A30**

G.Gallo et al.  
*Proof of principle of a Cherenkov tag detector prototype*  
Sensors **20**(2020)3437  
doi:10.3390/s20123437

**2020-A31**

D.Lo Presti et al.  
*Muographic monitoring of the volcano-tectonic evolution of Mount Etna*  
Nature Scientific Reports **10**(2020)11351  
<https://doi.org/10.1038/s41598-020-68435-y>

**2020-A32**

F.Riggi et al.  
*A reconfigurable scintillator-based small array facility for cosmic ray studies*  
Journal of Physics G Conf.Series 1561(2020)012020  
doi:10.1088/1742-6596/1561/1/012020

**2020-A33**

C.Pinto et al.  
*Monitoring the long term stability of civil buildings through the MRPC telescopes of the EEE Project*  
Journal of Physics G Conf.Series 1561(2020)012019  
doi:10.1088/1742-6596/1561/1/012019

**2020-A34**

G.Mandaglio et al.  
*MRPC telescope simulation for the Extreme Energy Event experiment*  
Journal of Physics G Conf.Series 1561(2020)012015  
doi:10.1088/1742-6596/1561/1/012015

**2020-A35**

P.La Rocca et al.  
*Scientific and educational aspects of the EEE Project*  
Journal of Physics G Conf.Series 1561(2020)012015  
doi:10.1088/1742-6596/1561/1/012012

**2020-A36**

M.Abbrescia et al.  
*Results from the PolarQEEEst mission*  
Journal of Physics G Conf.Series 1561(2020)012001  
doi:10.1088/1742-6596/1561/1/012001

**2020-A37**

I.Gnesi et al.

*Extreme Energy Events: an extended multi purpose cosmic ray observatory*

Journal of Physics G Conf.Series 1564(2020)012103

doi:10.1088/1742-6596/1564/1/012103