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SRU readout system of the ALICE Photon Spectrometer

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The ALICE experiment at the LHC aims to unravel a new state of matter called the quark-gluon plasma (QGP) produced in high-energy heavy-ion collisions. The PHOS detector in ALICE is an electromagnetic calorimeter composed of 12,544 lead-tungstate (PWO) crystals attached with avalanche photodiodes (APD). The PHOS realizes a fine granularity as well as a high energy-resolution of σ/E = 3.5\% at 1 GeV. One of important physics goals by the detector is to reveal thermal properties of the QGP by measuring thermal photons.
For this goal, it is essential to accumulate high statistics in Pb-Pb collisions with a peak luminosity of L = $6 \times 10^{27}\mathrm{cm}^{-2}\mathrm{s}^{-1}$. The PHOS team has decided to upgrade its readout system to a new one based on the point-to-point readout technique after the end of RUN-1. The new readout system is composed of 392 Front-End Electronics (FEE) boards and 14 Scalable Readout Units (SRU) and makes it possible to read faster.
The current status of the PHOS detector performed in RUN-2 for pp collisions at $\sqrt{s}$ = 13 TeV will be presented.

On behalf of collaboration:

ALICE

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