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To whom it may concern

As project manager of the RPC subsystem of the CMS experiments at CERN, I certify the progress made by the group of the Institute of High Energy Physics, Chinese Academy of Sciences (IHEP), under the supervision of Prof. Zhen-An Liu. Within the RPC upgrade program for HL-LHC phase, the IHEP group is responsible of developing the new Backend for the present RPC system and for the new RPC stations to be installed at high eta region of CMS. These stations, RPC 3/1 and 4/1, will be equipped with a new generation Resistive Plate Chambers (RPC) detectors (iRPC). In detail, the following milestones have been fulfilled:

➤ **Early 2019:**

- IHEP proposal for a new RPC backend system
- HEP modular ATCA prototype development for the proposal
- Serenity joint work recommendation

➤ **Middle 2019:**

- Development of uTCA board for iRPC backend/off-detector electronics
- Development of iRPC backend demonstration setup

➤ **Early 2020:**

- Development and validation of a backend system at CERN in 904 Laboratory
- Joint test between Backend and an iRPC detector prototype equipped with a new FEB electronics.
- Chamber test with cosmic muons and validation of the Backend system.

I would like to express my congratulation with the great progress done and successfully results obtained.

In case you need more information feel free to contact me.

Yours sincerely,