

**[P-117/ID-2-2] Classifying Astronomical Seeing Patterns of KSA SEM Observatory**

Kyung Hoon Lee, Im Suk Kang  
*Korea Science Academy*

We report patterns of Astronomical Seeing in KSA SEM Observatory. Though the data of seeing measured at local observatory is essential in identifying the seeing condition of the observatory, systematic measurement of seeing has not been made in Korea yet.. For this reason, we adopted a seeing-monitoring system, capable of measuring standardized seeing throughout an entire nighttime continually. We measured and accumulated the seeing data of KSA SEMO for 5 months and classified the data into 5 categories. We expect to use the data in many ways such as predicting astronomical seeing in Korea, after verifying relations between the seeing and various weather conditions.

**[P-118/ID-2-3] Study of high-energy cosmic rays by measuring coincidence events with plastic scintillation detector arrays at Kyeonggibuk Science High School and Hansung Science High School.**

Sunin Lim<sup>1</sup>, Yuni Lee<sup>1</sup>, Shinwoo Nam<sup>1</sup>, Il Heung Park<sup>1</sup>, Jongmann Yang<sup>1</sup>, Woram Cho<sup>2</sup>, Ilsung Cho<sup>2</sup>, YoungJoon Kwon<sup>2</sup>, Hyungchan Bang<sup>3</sup>, Byunggu Cheon<sup>4</sup>, Sohee Park<sup>5</sup>, Eugene Jung<sup>5</sup>, Yukyung Go<sup>6</sup>, Bokyung Kim<sup>6</sup>, Suyang Lee<sup>6</sup>, Hyoungjun Sim<sup>6</sup>,  
Kyung Hee Hong<sup>6</sup>

<sup>1</sup>*Ewha Womans University*, <sup>2</sup>*Yonsei University*, <sup>3</sup>*Seoul National University*, <sup>4</sup>*Hanyang University*, <sup>5</sup>*Kyeonggibuk Science High School*, <sup>6</sup>*Hansung Science High School*

COREA (COsmic ray Research and Education Array) collaboration installed plastic scintillation detector arrays at Kyeonggibuk Science High School and Hansung Science High School to measure high-energy cosmic ray air showers. Consisting of four large scintillation plates each, three stations were set up on top of the school buildings with 1 m spacing. All recorded events have been checked for the coincidence by comparing the time difference between any two single events from each station. Detected high-energy air showers using coincidence detection technique have been evaluated to determine the coincidence signals from each site. The simulation of air shower events by AIRES (AIR-shower Extended Simulations) program has been performed to make a comparison with collected shower events.