



Faculty of Science, SAITAMA Univ.

# 4<sup>th</sup> HiSEP Special Seminar

## 『A new era on the high energy physics: from the TeVatron to the PeVatrons』



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The observatories HESS, HAWC, AS-Tibet, and LHAASO, are opening a new window for studying high energy astrophysics: the Pevatrons (Peta-electron volts). This era started in 2016 by discovering the first PeVatron in the centre of the Galaxy by the HESS observatory. PeVatrons are astronomical objects that can accelerate particles at energies of PeVs, energies impossible to reach yet in man-made accelerators or colliders. Thus, just as in the 1980s decade, the Tevatron particle accelerator strongly impacted the high energy physics (HEP) by studying the energies of TeVs (Tera electron-volts), with PeVatrons, it is possible to contribute to the highest energy physics unprecedentedly starting in 2021. In this talk, I summarize our current knowledge of Pevatrons and their relevance to the HEP.

**Date & Time : 13:30-14:50 of July 29, 2021**

This is an **ONLINE-SEMINAR** with ZOOM service, for all students in the Faculty of Science and for those who are interested in natural sciences. Contact “[hisep.saitama@gmail.com](mailto:hisep.saitama@gmail.com)” to get the ZOOM connection URL.

高エネルギー天体での粒子加速についての先端研究を紹介する、英語  
セミナーです。ふるってご参加ください。

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