量子物理学・ナノサイエンス第 301 回セミナー

Theoretical issues in physics of superheavy elements: nuclear reactions perspectives

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日程　：　11 月 9 日（月）15:30－17:00

場所　：　Zoom*

概　要

Physics of superheavy elements has been one of the most important topics in low-energy nuclear physics. In particular, after the successful synthesis of the element 113 (Nh, Nihonium) at RIKEN, it has attracted lots of attention in recent years. Heavy-ion fusion reactions at energies around the Coulomb barrier have been used as a standard tool to synthesize superheavy elements. It is indispensable to understand its reaction dynamics in order to efficiently synthesize new elements, going beyond the 7th period in the periodic table. However, the fusion reaction in the superheavy region is nothing more than the dynamics of many-body systems under the strong Coulomb field, and there still remain many challenges. In this seminar, I will Discuss the current status and future perspectives of the physics of superheavy elements, putting some emphasis on nuclear reaction perspectives. I will also discuss briefly fusion of neutron-rich nuclei, in connection to a synthesis of superheavy elements.

*本 ZOOM セミナーに参加されます場合には、事前に下記より登録を済ませてください。

https://zoom.us/meeting/register/tJIocO-vrjkrGNG2NKQaAttV0Gw6cOmJd7bD

ご来聴を歓迎いたします。

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