先端研レクチャーシリーズ　第6回・第8回

Physics of unbound light nuclei with complex scaling

（複素スケーリングによる軽い非束縛核の物理）

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日時：第6回 令和２年７月３０日（木）１０：００～１１：３０
　　第8回 令和２年　８月６日（木）１０：００～１１：３０

場所：Zoomによるオンライン講義

Lecture is given in Japanese with English slides.

要旨

Complex scaling is one of the powerful methods to describe the resonances with complex energy eigenstates, which are based on the non-Hermitian quantum mechanics. In this talk, we would like to discuss the following two topics.

1. Basic properties of the complex scaling in the description of the unbound states. We present the applications of the complex scaling not only to the resonance spectroscopy, but also to the scattering problem, which is treated by using the Green's function with complex scaling.
2. The unbound phenomena of light nuclei studied with complex scaling. We focus on many-body resonant and continuum states observed in light proton-rich and neutron-rich nuclei. We discuss the explicit roles of resonant and continuum contributions in the transition strength functions.

連絡先：宇都野　穣　(81-6901)

＊ZoomのURLにつきましては、先端理論物理研究グループ
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