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Complete Glauber calculations for high-energy inelastic processes

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The Glauber theory is a powerful and widely used method to describe
high energy nuclear collisions. Since the complete evaluation
of the so-called Glauber amplitude is much involved,
approximate treatment has often been made.
In this contribution, we present our recent developments
of the Glauber model calculations for
nuclear inelastic processes. The Monte Carlo and the factorization methods are employed in order to evaluate the Glauber amplitude which involves a multi-dimensional integral.
The power of the complete Glauber calculations is demonstrated
by showing some examples:
The total reaction cross sections of 22C [1],
and the inelastic cross sections involving deformed nuclei [2].

[1] T. Nagahisa and W. Horiuchi, in preparation.
[2] S. Hatakeyama and W. Horiuchi, in preparation.

Summary

Primary author: Dr HORIUCHI, Wataru (Hokkaido University)

Co-authors: Mr HATAKEYAMA, Shinya (Hokkaido University); Mr NAGAHISA, Taku (Hokkaido University)

Presenter: Dr HORIUCHI, Wataru (Hokkaido University)

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