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## Skyrmions and clustering in light nuclei

*Tuesday 3 September 2019 09:00 (35 minutes)*

It is almost 60 years since Skyrme introduced his model of nuclei as topological solitons (Skyrmions) in a nonlinear pion theory. I shall review the Skyrme model and discuss some of the successes and failures of Skyrmions. In particular, I will describe some recent work that yields improved results for binding energies and clustering in light nuclei, by extending the standard theory of Skyrmions to include the next lightest subatomic meson particles traditionally neglected. Related Skyrmions in magnetic materials will also be briefly discussed.

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