

Alchemy in the 21st Century

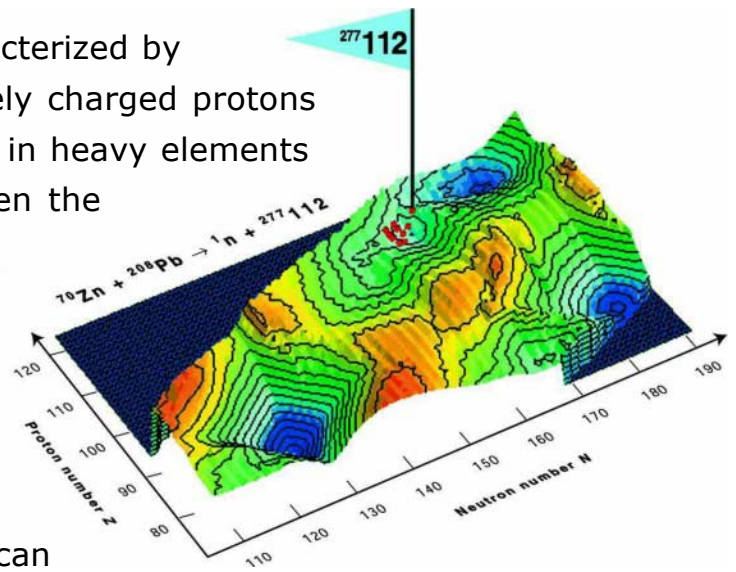
The Quest for Superheavy Elements

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A chemical element is characterized by the total number of positively charged protons in the atomic nucleus. Thus in heavy elements the strong repulsion between the protons reaches a similar magnitude to the strong nuclear force binding the protons and neutrons into the nucleus. The question of the largest number of protons and neutrons that can



thus be bound has been at the heart of nuclear structure research for several decades. A major challenge is the creation of such heavy nuclei, because the end product is such a delicate object that it only very rarely survives the process. This talk covers the history of super heavy elements, introduces some key experimental methods, offers plenty of illustrated examples and cites some recent results in this exciting field.

Light refreshments will be available from 5.30 pm

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