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The Importance of Concavity for Nuclear BEs and Thermodynamical Functions¹ BRUCE BARRETT, University of Arizona, BERTRAND GIRAUD, CEA Saclay, BYRON JENNINGS, TRIUMF, NICHOLAS TOBERG, CMS, Cambridge — The role of concavity of nuclear energy chains or surfaces in determining the BEs of unknown nuclides by extra- and/or interpolation will be presented. Studies of the concavity of nuclear thermodynamical functions allows the determination of the average value of H and the free energy as functions of the average value of A for finite temperature. These two quantities allow error bars to be set on the BEs predicted previously. The consequences of the concavity of H on the nuclear density functional will also be discussed.

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