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State of the EMPIRE: progress, issues, and future

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We will briefly summarize changes in the EMPIRE code since the last CNR meeting in 2018. Then we will discuss the fundamental issue of gradual absorption in the Multistep Compound mechanism that has been hindering its use in evaluation work. A new attempt at solving the problem will be presented. We will also mention the advanced treatment of gamma emission in the MSC that, albeit implemented a long time ago, is not well known within the community. Finally, we will indicate open problems and possible improvements along with the guidelines for the intended vast modernization of the whole code, including the use of Artificial Intelligence.

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