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## 20 years of microscopic Nuclear Level Densities from drip lines to drip lines

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Nuclear reaction models, and in particular compound nucleus reactions, require the knowledge of nuclear level densities (NLDs), among other ingredients. For decades, analytical expressions have been used in nuclear reaction codes, due to the freedom they offer to the user to modify their associated parameters in order to fit cross sections.

The development of computational resources has opened a new era, roughly 20 years ago, by allowing the systematic calculation of NLDs from more microscopic approaches and their use in reaction codes through tables stored in databases.

During this 20 year period, several approaches have been developed to improve step by step the physical description of NLDs. We will review all these efforts and will show where we are now and what we foresee as future improvements.

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