

# **“NUCLEAR-PHYSICS ISSUES OF R-PROCESS NUCLEOSYNTHESIS”**

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On the basis of recent meteoritic and astronomical observations, the present contribution aims at an improved understanding of r-process nucleosynthesis by addressing the main nuclear physics quantities involved, in particular nuclear masses,  $\beta$ -decay properties, neutron-capture rates and fission modes. Remaining experimental and theoretical challenges for a full understanding of the nature of the r-process(es) will be summarized.