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## Latest results from MARA

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A new vacuum-mode separator, MARA (Mass Analyzing Recoil Apparatus) [1, 2], has been completed and has extended the research possibilities with the existing gas-filled recoil separator, RITU [3] at JYFL-ACCLAB. The ion-optical configuration of MARA is QQQDEDM, differing significantly from the other existing in-flight separators around the world. MARA has turned out to be a very reliable separator and easy to operate. The studied nuclei of interest have been produced using fusion-evaporation reactions, mainly employing symmetric or inverse kinematics. In-beam studies, isomeric studies as well as production of new isotopes have been performed at and beyond the proton dripline starting from a mass number 66 up to a mass number 180. In this work some highlights of the latest results using the JYFL in-flight separator MARA will be given.

[1] J. Uusitalo et al., Acta Physica Polonica B 50 (2019) 319

[2] J. Sarén et al., Research Report No. 7/2011, University of Jyväskylä

[3] M. Leino et al., NIMB 99 (1995), 653

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