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# DECAY FEATURES OF MEDIUM MASS NUCLEI AT HIGH EXCITATION AND SPINS

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Data concerning fusion-evaporation events for the compound nucleus  $^{88}\text{Mo}$  at excitation energies in the range 1.4-3.0 A MeV are presented. They have been collected with the GARFIELD setup coupled to a wall of phoswich telescopes at INFN-LNL in the reaction  $^{48}\text{Ti}+^{40}\text{Ca}$  at 300, 450 and 600 MeV. Proton and alpha particle characteristics are discussed and compared

to the predictions of the statistical model, in order to tune its relevant parameters for nuclei at high excitation and high spin values.

With respect to the model, we found an excess of forward emitted alpha particles, whose amount increases with the beam energy. From such an excess we extracted an upper limit for the pre-equilibrium emission. Fusion evaporation and fusion fission cross sections have also been extracted; the obtained value of the fusion-evaporation cross section is compatible with the existing systematics.