Abstract Submitted for the APR07 Meeting of The American Physical Society

Nuclear Structure with Gammasphere/CHICO and beyond¹ CHING-YEN WU, Lawrence Livermore National Lab — The sensitivity and selectivity attained by Gammasphere in conjunction with CHICO has provided unique opportunities to explore exotic aspects of nuclear structure, such as the population of K isomers and electromagnetic properties of the S band in nuclei. Furthermore, the capability of Gammasphere/CHICO allows the nuclear structure study expended into the new territory of exotic nuclear with extreme neutron/proton ratios, populated in the fission processes and deep-elastic reactions. Selective examples to address specific aspects of nuclear structure will be given. In addition, the plan to further improve the ability of studying the nuclear structure of exotic nuclei by building SuperCHICO with the position resolution matching that of GRETINA and TIGRESS will be discussed.

¹The work was performed under the auspices of the US DOE by U. of California, LLNL under contract No. W-7405-ENG-48

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Date submitted: 11 Jan 2007

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